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ART. I.—*Observations on the Medical Topography, Climate, and Endemic Influences of South Alabama.* By JAMES C. HARRIS, M.D., of Wetumpka, Alabama.

Aware of no systematic attempt since the work of Dr. Heustis, published at Cahawba, in 1825, at a description of the causes, symptoms, and treatment of our autumnal fevers, and being thoroughly impressed with the importance and correctness of the remark of Malte Brun, "that not only the best observations upon climate often lose half of their value, for the want of an exact description of the surface of the country, but that the diseases incident to particular localities cannot be properly comprehended or treated," I have been induced to offer to the profession of the South the following facts, observations, and deductions, under a hope that should they fail to enlarge our views concerning the etiology or treatment of fever, they may serve to bring about a more correct

understanding of the subjects involved, and answer hereafter as a neucleus, in the hands of some one more able to do the subject justice, in the formation of a more comprehensive treatise on the diseases of the South.

The Southern portion of Alabama, of which it is our intention more particularly to treat, lies entirely between the parallels of 30° 10′ and 32° 30′ north latitude. The extreme southern limit bordering on the gulf of Mexico, for the space of 50 or 60 miles, is low and level, and covered with pine and cypress. The remainder, off the water courses, consists of rolling uplands interspersed with prairies. The soil of the ridges and uplands is generally sandy and unproductive, but throughout a large portion, particularly along the margins of rivers and creeks and in the prairies, it is most excellent, covered in some places in a state of nature with a dense and impenetrable growth of cane, and in others, clad in a forest of oak, hickory, dogwood, magnolia, &c.

The western limit of the great Atlantic plain at Columbus, Georgia, is very distinctly marked by a ledge of primary rocks, which recede at that point to the northwest through Alabama and Mississippi, until the Atlantic plain is merged in the Mississippi valley. Among the physical features that characterize this alluvial zone, the northern limit of which in passing near Wetumpka and Tuscaloosa is but little elevated above the Gulf of Mexico, and to which it gently slopes down, are that it is composed entirely of the tertiary and cretaceous deposits, and abounds in the sands and marls and organic remains of that series of formations, being furrowed with deep ravines and sluggish streams, interspersed with extensive morasses and swamps, and having wide arms of the Gulf of Mexico extending far inland. Thus this portion of the State presents a great southern inclination of surface to the action of the sun, filled with all kinds of organic matter undergoing decomposition, and creating one among the most extensive hotbeds of malaria known within the geographical limits of the Union.

The mean annual temperature of our climate may be stated at about 64° Fah., and although not subject to so great a thermometrical range as many other countries, still the variations from heat to cold are sudden and frequent, often rendering fires during the summer and fall months after sun down and blankets at night indispensable to comfort, and that after a day when the heat has ranged from 72° to 90°. The winters are so mild that the streams are never frozen over, and the heats of summer are greatly mitigated by refreshing breezes from the Gulf.

The principal rivers are the Mobile, the Alabama, and their tributaries, the Tombigbee, the Cahawba, the Talapoosa, and the Coosa, the two latter forming the Alabama. The Mobile, about 50 miles above the city of Mobile, is formed by the union of the Tombigbee and the Alabama, which latter is also a considerable stream, and is navigable for vessels, drawing from five to six feet water, to Claibourne, 60 miles above its junction; one hundred and fifty miles further, viz: to the mouth of the Cahawba, it has four or five feet of water, and from thence to the junction of the Tallapoosa and Coosa, and up the latter to Wetumpka it is navigable for light draught steamboats with few exceptions at all seasons of the year.

Mobile, the emporium of the State, is situated on the west bank of Mobile river, at its entrance into Mobile Bay, in latitude 30° 40″ north; it is laid out upon a beautiful and extended plain, elevated some fifteen feet above the highest tides, open to refreshing breezes from the bay and commanding a fine prospect.

The other towns on the Alabama, or immediately above the limits of the Atlantic plain, of any importance are St. Stephens upon the Tombigbee, Tuscaloosa upon the Black Warrior, Claibourne, Cahawba, Selma, and Montgomery upon the Alabama, and Wetumpka upon the Coosa.

As a general rule, South Alabama is but indifferently supplied with permanent springs, some of the most fertile dis-

tricts being almost entirely destitute. This is more especially true of the counties of Green, Marengo, and Sumpter, and the prairie portions of Montgomery and Lowndes. In these districts the artesian auger has been used to supply this deficiency.

From what has already been said it will be perceived that South Alabama proper consists almost entirely of Atlantic plain and slope, and that the extreme limits of the former terminate upon a circle drawn from Mobile and extending some hundred and fifty miles from the Gulf of Mexico, into the interior, embracing within its circumference St. Stephens, Cahawba, Selma, &c. This region, over which are scattered hill and valley, woodland and prairie, is emphatically that of long moss, and mosquetoes, the former gradually extending its mournful drapery, and the latter their musical companionship to the extreme boundary of the Atlantic slope.

To the mind of the believer in the malarial origin of fever, there is perhaps no particular region of the south or southwest that furnishes so many proofs in support of his opinion, as the one we have just described, and none, with whose history we are familiar, that affords so many bright examples in elucidation of some of the most obscure and long disputed points connected with this subject.

The greatest wonder with us is not that the atmosphere of the region we have been describing should during the summer and fall months become unhealthy, but that it should not actually become unfit for respiration, and instantaneously destructive of life. The question then is not whether our atmosphere becomes adulterated or sensibly altered, which all of the least observation are compelled to admit, but what kind of alteration it is that it undergoes, or what additional element it is that it receives. This as yet is a subject that has eluded the research of the most scientific. From many facts within our knowledge we are irresistibly driven to the conclusion, that for the development of yellow fever there must be some sensible alteration in the atmosphere of the lo-

cality, aside from that necessary to the production of other forms of bilious disorder. In a communication upon this subject, received by the writer from Dr. Edward Gault, of Selma, bearing date July 1st, 1846, it is remarked that during the summer of 1820 the heat was not greater than the present and many others, where the mercury ranges from 80° to 95° in the shade; with seasonable showers; nor did the yellow fever, or any other malignant epidemic prevail that summer in Mobile, or at any other point upon the Alabama river, equal to Cahawba, where the disease was of a high grade of remitting fever, in many instances terminating fatally upon the 3d, the 5th, and 7th days. It was rarely attended with black vomit, but frequently with collapse, and a chocolate, or brown cadaverous hue. Up to the fall of 1821, there had been no navigation of the river by steamboats, but since that time this means of communication has been introduced and has increased every year.

The situation of Cahawba is described by Dr. Gault as being low, upon the north bank of the Alabama river, which at high tides overflows the entire town. East, and above the town, the Cahawba river enters the Alabama, and upon the north, one mile, a creek enters the former; on the west is a considerable extent of marshy ground, giving vent to the water from a higher table of lands, two or three miles off in that direction. Across the Alabama river, at no great distance, was a pond, or lagoon, covering some 20 acres, which has since been drained.

In addition to the above causes, a large amount of alluvial soil was exposed to the action of the sun, from the cutting down of the timber and cane, and clearing up and putting into cultivation large districts of the surrounding country, and this, with the additional fact that but few, if any, of our citizens were acclimated, being generally from the old settled parts of the northern and middle States, a scarcity and an inferior quality of provisions, together with the disappointments and vexations incident to settling a new country, con-

stitute some of the remote and predisposing causes which in our opinion, operated most powerfully in the production of the epidemic under which we labored.

In 1824 the yellow fever appeared in Selma, and that section of the country known as the Pleasant Valley, ten or twelve miles north; one case under Dr. Phillips terminated fatally on the third day after black vomit, and several cases under my inspection on the fifth and seventh days after the same, some in collapse. There was no yellow fever in Mobile at the time.

The planters of the Valley attributed the fever to the extensive rot and decay of the roots of the cane brakes, which took place about that time.

In the year 1826, the yellow fever prevailed in Mobile, and the steamboats were so infected with the disease that several towns refused their stopping. Montgomery and perhaps also Selma, would not receive their sick. I have been credibly informed by the citizens of Mobile, that during the prevalence of this fever not one lived who attempted to remain in the city after an attack; that there was only a single case of death after removal to the country; and that not a solitary case of fever occurred in the country in any family among whom the sick were removed.

As regards the cessation of fevers at the beginning of frost, it appears from my observations that frost does not always check the prevailing fever of any type, unless when accompanied by a corresponding change in the atmosphere, and that change I presume would answer without frost. I have seen the fevers of the fall type in Tennessee continue until the middle of the following February.

Since residing upon the Alabama river, I have observed no cause so certain to produce a sickly summer, as an overflow or inundation in the spring, and the "*later* the *worse.*"

Dr. Heustis, in his work before alluded to, remarks that the low grounds and swamps adjacent to the Alabama and Cahawba rivers, were frequently inundated during the

spring of 1821, so that it was late in May before many of the farmers upon the rivers had an opportunity of planting, owing to the highness of water. A considerable rise in the river took place in July, and such was the quantity of rain that fell early in the summer, that many of the farmers were entirely frustrated in their attempts at planting, the earth being so completely wet and inundated, that the seed rotted in the ground; so that many were obliged to plant the same field three or four times, and then in several instances were doomed to lose their labor, and abandon the undertaking as hopeless.

Such indeed was the situation of affairs in many instances upon the river; in others less injury was sustained, and upon the uplands remote from the river the crops came forward with considerable certainty; even there, however, crops of corn and cotton were injured by the excessive rains, and replanting became a business of equal necessity.

The average range of the thermometer during the month of June, was at 7 A.M., 73°; 2 P.M., 85°; and 9 P.M., 77°; and throughout the month of July the average temperature, as indicated by the same thermometer, was, at 6 A.M., 71°; at 3 P.M., 84°; and, at 9 P.M., 75°; making the mean temperature throughout the day and night 76°.20.

'In Alabama,' continues the same author, 'we certainly have a much longer continuance of hot weather, as well as a higher range of temperature during the summer months, than is found to prevail in the State of Pennsylvania. I have frequently observed the thermometer as high as 90° or 96° in the passage of a tolerably cool house. This circumstance creates among us a greater liability to summer and autumnal diseases, than the inhabitants of more northern countries.'

In addition to the foregoing causes it may be remarked that the temperature throughout the months of August and September continued about equal to that of July, towards the latter part of which month, and when the rains had measurably ceased, and the water of the ponds and marshes had considerably evaporated, and the river had fallen within its banks, the

work of putrefaction went on with rapid strides, and disease began to make its appearance.

As it is a well established fact that a country clothed with a dense forest and luxuriant vegetation, from the protection furnished the surface of the earth by the thick foliage of the trees, and the evaporation from the leaves of the different vegetables, is *colder* and more *healthy* than one that is being cleared up, it follows as a matter of course that the climate of particular localities in Alabama, during the process of clearing, has undergone a considerable change in this particular, and that it is upon this hypothesis that we are enabled, to a considerable extent, to account satisfactorily for the various epidemics that have successively visited various sections of our State; nor have we the shadow of a doubt that circumstances such as we have detailed, together with the nature of the seasons, have been the remote cause of the fevers that have prevailed at different times at Cahawba, Selma, Mobile, St. Stephens, Montgomery, and Wetumpka, as well as the other towns and neighborhoods in South Alabama. That they will forever recur, at intervals, under similar circumstances, we are as thorougly satisfied and have as good reasons for believing.

After examining the rise and progress of yellow fever, throughout the southern portions of the United States, and comparing the facts thus acquired with the following table, it will appear that there is no well authenticated account of yellow fever prevailing as an epidemic further from the seacoast upon a straight line, than one hundred and fifty miles, and that this distance has only been acquired in four instances, under peculiar circumstances, as at Cahawba, Alabama, and Natchez, Mississippi.

GEORGIA.

Savannah—Lat. 32° 8′ north; long. 4° 10′ west. Tide water.

Augusta—Lat. 33° 24′ n., long. 4° 45′ west. Distance from tide water 110 miles.

Columbus—Lat. 32° 30′ n.; long. 8° west. Distance from tide water 165 miles.

ALABAMA.

Mobile—Lat. 30° 40″ n.; long. 11° 10′ west. Tide water.*

St. Stephens—Lat. 31° 30′ n.; long. 11° 5′ w. Distance from Mobile 64 miles.

Cahawba—Lat. 32° 20′ n.; long. 10° 10″ west. Distance from Mobile 130 miles.

Wetumpka—Lat. 32° 30′ n.; long. 9° 15′ west. Distance from Mobile 175 miles.

Tuscaloosa—Lat. 33° 15′ n.; long. 10° 38′ west. Distance from Mobile 180 miles.

LOUISIANA.

New Orleans—Lat. 29° 57″ n.; long. 14° 13′ west. Tide water.†

MISSISSIPPI.

Natchez—Lat. 31° 22′ n.; long. 14° 30′ west. Distance from New Orleans 105 miles.

As there are other places in the same latitude equally surrounded with all the local causes known, under favorable circumstances, to produce malaria in great abundance, it follows as a matter of course, that there must be some other action in the atmosphere, which being added to its already existing malarious constitution, renders it capable of producing the disease.

To illustrate our position more clearly, we will now endeavor to ascertain what this sensible alteration and its cause is, and then see if yellow fever does not always appear under exactly the circumstances known to be in existence at the places, and in the seasons that have been found by experience necessary to its production.

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* From Mobile to Mobile point 30 miles.
† From New Orleans to the Gulf of Mexico 55 miles.

We believe that it is a well established fact that yellow fever, so far as the United States are concerned, has never appeared as an epidemic in a higher latitude than 40° north, and even then but seldom, and immediately upon or very near the sea shore, as at New York, Philadelphia, Baltimore, Richmond, &c.

As there have as yet been but few hygrometric experiments made in the United States, and those, so far as we are able to ascertain, confined to its northern portions, remote from the ocean, we labor under great disadvantages in the investigation of this subject, but although in a great measure divested of necessary data, we have some observations bearing immediately upon the point which we think are of so clear a nature, that they will be sufficient to convince the most skeptical of the truth of the following propositions; namely: That if yellow fever does not always originate in low southern latitudes, immediately upon the ocean, or large bodies of water, under high, long, and continued heats, it is for the want of a corresponding alteration in the dew point; that these circumstances when they do occur below the line of 33° of latitude in Georgia, 32° in Alabama, and 31° 30′ in Mississippi, and south and south west of these points, are most generally attended with a high dew point; and that it is only when acting together, that they possess the power of producing the disease under consideration in an epidemic form.

Fortunately, remarks Dr. Lee, as a general rule in our climate (that of New York) the dew point is many degrees below the temperature; it is but rare indeed that they nearly or quite coincide, and when they do such weather is called sultry or close, and its depressing influence upon the system is too well known to be described; the very color of the skin, to say nothing of the languor of the mind, and the debility of the muscular system, shows that the blood does not undergo the proper change in the lungs. We also find that highly malignant fevers prevail where the dew point is below 60°, and that in high northern latitudes, and the northern

and middle portions of the United States, except at a few points below 40°, and upon the ocean, the heat is never sufficiently high for any length of time to carry the dew point up to the 60th degree. This, however, unfortunately for us is not so in our southern latitudes; here, within the tropics, and the country bordering thereon, we find as a general rule a hygrometric condition of the atmosphere vastly different from that which prevails in the temperate zones. With a high summer temperature, we have also a high dew point. Captain Alexander states that during his voyage to the river Gambia in Africa, the thermometer, on the 6th of October, stood at 80° in the shade, whilst the hygrometer stood at 70°. At another time the thermometer was 84°, and the hygrometer 79°.

The annual average mean of the hygrometer in the Island of St. Vincent, one of the Carribee Islands of the West Indies, in latitude 12° 23′, is always above 60°, and the average heat is proportionably high. Hence we infer that in Havana, Vera Cruz, and all other places where yellow fever and other high grades of bilious fever are prevalent, the mean heat and the dew point must be correspondingly high; and that for sometime before and during the prevalence of yellow fever, they approximate very closely to each other, and produce a close, sultry, and oppressive state of the atmosphere.

In the West Indies, yellow fever is endemic, and prevails from six to nine months of the year. When it becomes epidemic in the city of Havana, it is always under high and long-continued thermometrical and hygrometrical influences. These, in connexion with already existing malarious causes, never fail to produce the worst forms of the disease. It generally becomes epidemic in the city of Havana, which is in latitude 23° 12′, about the first or middle of May, and five or six weeks afterwards in the city of New Orleans. Shortly after its appearance in this latter city cases are also reported at Mobile, and afterwards at Savannah.

In its spread from New Orleans up the rivers throughout Louisiana and Mississippi, and from Mobile and Savannah, the same ratio of progression is observed, until it has reached the extreme limit of the Atlantic plain, where it ceases, from the well known fact that the epidemic constitution of the atatmosphere necessary to its production never passes this boundary.

Indissolubly connected with the foregoing causes, are some others that must exercise a controlling influence in the production and extension of our endemics; and of these perhaps heat, elevation, and winds, exert as great an influence as any others. In Alabama as we advance from the sea shore to the interior or hilly regions, bordering upon or beyond the extreme limits of both the Atlantic plain and slope, the summer heat is increased, and as we return to the sea board upon the same plain, the cold of winter is moderated in the same ratio.

From what has been said it is evident that the dew point and the thermometrical heat upon an island under the equator, or nearly so, as at St. Vincent, will at all seasons be nearly coincident; and that when the daily or monthly mean heat should steadily range from 80° to 95° in the shade, and the hygrometer indicate the dew point as correspondingly high, yellow fever, the highest grade of malarial disease known to these islands, or in the southern portions of the Union, would be developed.

This atmospheric condition, aided perhaps by other causes heretofore enumerated, being communicated through the influence of the land and sea breezes from the Island of Cuba, where it nearly always prevails, to New Orleans, Mobile, and Savannah, when it finds sufficient local food in these cities must produce, though perhaps in a less aggravated form, the same character of disease.

It has been demonstrated by actual experiment,* that when

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* British Army Meteorological Report.

the atmosphere is loaded with moisture, the heat of the same and the dew point more nearly approximate. Then with a temperature at New Orleans or Mobile throughout the months of June, July and August, ranging from 85° to 90°, with a corresponding elevation in the dew point, we could not expect anything else, provided moisture and vegetable matter were in sufficient quantities, but the prevalence of all the high grades of febrile disease. It must however be borne in mind that whilst the mean summer heat is greatly modified upon the coast by the sea breeze, the dew point owing to great moisture of the air has been ascertained to be frequently elevated. As we advance upon the Atlantic plain, and until we pass a certain elevation, the first is slightly increased, and the latter diminished, until we pass its confines, where they are no longer capable of producing high grades of malarial disease.

Although the relative difference between the mean summer temperature, upon the sea coast and the interior, has been shown to be greater at Tampa Bay, Florida, than at Jefferson Barracks, Missouri,* still we do not wish this to be taken as giving a fair representation of the fact upon that subject, so far as the great Atlantic plain in Georgia, Alabama, and Louisiana is concerned, as it is a well established position from innumerable thermometrical observations made at different times, and at various places, that the annual mean summer temperature is several degrees lower on the sea coast, upon the bays, the interior lakes, and for some distance up the large water courses than at other points upon the same plain, and remote from these. In fact only a small part of the southern regions of South Carolina, Alabama, Louisiana, or Mississippi, below the 33d, 32d, and 31st degrees of latitude, appear to be sufficiently elevated to cause a diminution in the summer heat; but on the contrary, off the large water courses the reverse obtains. The thermometer

* Forry on Climate.

ranges in the interior from 98° to 72°; whereas on the sea board it scarcely ever exceeds 91° or 92°. This difference was observed between Charleston and Columbia in 1808; it has also been noticed between Savannah and Augusta, Wetumpka and Mobile, and Natchez and New Orleans; and is greater in proportion to elevation and removal from the sea shore, and beyond the influence of the sea breeze, and other sources of moisture. In assuming the above position we do not wish to be understood as meaning to advance the idea, that the annual temperature is increased from the equator to the poles; but merely as stating a physical fact, in relation to the summer temperature of the regions in which yellow fever most generally, if not universally, delights to dwell.

From all that we can learn or have observed, we feel perfectly satisfied that the result of the combined operation of the remote causes heretofore enumerated, are such as to create a predisposition to disease, which only requires some exciting cause to develope the various grades of our autumnal fevers; and that they are all, from the simple intermittent to the more formidable yellow fever, the result of physical causes alone acting upon constitutional predisposition.

And here for the present we conclude. The treatment of fever remains to be considered, and that shall be made the subject of a future communication.

Wetumpka, July, 1846.

ART. II.—*A Case of Puerperal Mania from Suppression of the Lochia; and one of Mania a Potu complicated with Pleurisy.* By JAMES M. LARKINS, M.D., of Charlotte, Tenn.

Mrs. C., aged about 28 years, had been in a state of mental derangement for a month when I saw her at the beginning of June. The history of her case was as follows: She had been a delicate girl, her menstrual discharge having been attended with pain and difficulty; she was married at the age of 20 years, and is the mother of three children, the

youngest of which was nearly three months old when I was called to visit her. In her last confinement she had been attended by an ignorant midwife, who left her in the hands of a still more ignorant nurse. The nurse fancying there was something amiss in the lochial discharge undertook to suppress it by astringents, in which she was but too successful. The discharge, which ceased soon after delivery, was never reestablished, and the mind of the patient in a short time became excited and finally deranged. Her first medical attendant unfortunately knew little about diagnosis, and mistreated her case. He pronounced the affection one of pure mania, and resorted to the treatment usual in ordinary cases of that malady. Blisters were applied to the nape of her neck, and the cold dash employed.

When I saw the patient she presented the following appearances: Her eyes were blank, and her face expressive of great fear and distress; she was sleepless; her lower extremities cold; body alternately hot and dry, and suffused with perspiration; pressure over the region of the uterus caused her countenance to express pain though she did not complain of it; her language was wild, incoherent, and often obscene; though greatly exhausted, her muscu ar efforts were violent, so that she was restrained with difficulty. I adopted the following treatment: A large pill of asafœtida was given every hour or two, and a teaspoonful of sulphuric ether every four or five hours; her bowels were kept soluble and occasionally purged by hiera picra; the tepid hip bath was used once or twice daily; and she took every six hours a teaspoonful of a tonic mixture composed of sulphate of quinine and nitric acid.

The first night after this plan was adopted the patient slept quietly, and from that hour began rapidly to improve. In a fortnight she was restored to health of mind and body.

The following case of *mania a potu*, complicated with pleurisy, I had an opportunity of observing in Clinton, Ky., in March last. The patient who was a school teacher by oc-

cupation, was in the county jail waiting the session of Court by which the question of lunacy was to be tried. I found him with true pleuritic symptoms, but soon recognised the *mania* as that species induced by *drink*. He was accordingly removed from the jail to a private dwelling. The symptoms were of extreme severity—the tremors such as to shake his bed, the mental disturbance excessive; his tongue red and pointed; cough and pain in the side.

Bleeding was suggested by his medical attendant, but was not adopted on my dissenting from its propriety. A blister was applied over nearly the entire chest; oxymel of squills and mucilaginous drinks were given, and cold water poured over his head. In addition, for the cerebral symptoms, calomel and opium, 2 grains of the latter to 3 of the former, were administered every two hours. At first we tried smaller doses of opium but found them insufficient. In ten days from the adoption of this course the patient was relieved of the pleuritic symptoms, and also of his delirium.

July 15th, 1846.

ART. III.—*A Case of Tubercles of the Brain.* By WM. C. SNEED, M.D., of Frankfort, Ky.

The subject of this case was an inmate of the Kentucky penitentiary. He entered that institution about three years since, at which time he appeared to be a man of about thirty five years of age, and of good constitution; but he had been in the habit of indulging freely in ardent spirits. About two years since he entered the hospital of the prison, with some disease which we could not at that time clearly distinguish; he was feeble, complained of headache, loss of appetite, and general debility. After remaining in the hospital three or four weeks, and occasionally taking a little medicine, he recovered sufficiently to resume his occupation (that of *filling*

spinner), and so continued up to his last illness. About five weeks since he entered the hospital with diarrhœa and was placed under treatment for that disease; in a few days, however, he was relieved, and was placed by the keeper as a laborer in the stone-quarry near the walls of the prison, where he was exposed to the sun during the intensely hot weather in the early part of July.

In a few days he came again to the hospital complaining of great general debility and a pain in the front part of his head. Suspecting typhoid fever, we had his bowels evacuated, placed him upon rice water as a diet, and administered some mild diaphoretic medicine. He continued to emaciate, lost appetite, and remained in a half lethargic state up to the time of his death.

The pulse was slow and regular during the whole of the attack, varying from 55 to 70 beats in a miuute; the tongue generally coated white, but never dry; there were no nervous symptoms, no paralysis, no delirium, nor symptom of any kind that indicated active disease of the brain. During the early stage of the attack the pupils of the eyes were somewhat contracted, but shortly before death slightly dilated; there was no indication of fever, nor any stupor; but he was able to distinguish and answer questions propounded the day before his death, which occurred on the 13th inst.

Autopsy six hours after death.—The abdomen was first opened, and the bowels found in a very contracted condition but otherwise healthy; the mesenteric glands were slightly enlarged and indurated, and the assisting chylopoietic viscera apparently healthy.

The thorax was next opened, and both lungs found adherent to the parietes of the chest, the left more extensively than the right, and both filled with crude undeveloped tubercles, very generally dispersed and more numerous in the right lung. Nothing being found in either of these cavities sufficient to produce death, we were led to the brain, confi-

dently expecting that in that viscus some lesion would present itself sufficient to produce it.

On removing the above, the glandulæ pacchaoni were found numerous and large, but none softened or suppurated; a collection of pus occupied a space the size of an eagle half dollar, to the right of the median line, and near the upper posterior angle of the right parietal bone; the dura mater appeared sound when the pus was removed, but the ulcer had extended nearly through the inner table of the skull.

Whether this ulcer was produced by caries of the inner table primarily, or by the softening of one of the glands, we were unable to determine; but caries existed and presented a phenomenon rarely met with. The dura mater was removed and found adherent to the pia mater at the frontal sinus, but no other part; and the arachnoid studded with tubercles, small but hard. Externally, the brain appeared natural, but a section of it presented an immense number of tubercles; in the cortical substance they were large and hard, but in the cineritious many had softened, and their places were occupied by yellow pus. They were not grouped, but generally dispersed; they were usually the size of a pea, and occupied almost every portion of the organ—both hemispheres, the corpora striata, thalami optici, medulla oblongata, crura cerebri and cerebelli. The ventricles contained more fluid than natural, but no evidences of recent inflammation of the brain were found.

The history of the case, together with the appearances found in the post-mortem examination, would lead me to the following conclusions:

1st. The disease had been approaching for years, but so gradually and slowly as not to give rise to any active symptoms.

2d. That it was of a scrofulous character, and would ultimately have attacked either the lungs or mesenteric glands, and in that way produced death.

It is remarkable that the formation and softening of so ma-

ny tubercles, did not give rise to more active symptoms than were present during his illness. We are at a loss to account for the slowness of the pulse, the absence of paralysis and fever, the rapid emaciation, and the clearness of his mind.

August 20th, 1846.

ART. IV.—*Notes on Medical Matters in Paris.* By DAVID W. YANDELL, M.D., of Louisville, Ky.

PARIS, October 1st, 1846.

The regular course of lectures in the *Ecole de Médecine* are just about to open, and while as yet I am not in possession of a sufficient amount of matter strictly medical to fill a letter, I propose to occupy a little space in the Journal with a description of the *Garden of Plants.* This wonderful assemblage of objects, relating not only to our profession but to nearly every branch of natural history, has great interest for the medical man. In the close of my letter I shall be able to present a few items of medical news.

Jardin des Plantes.—Louis XIII was persuaded by his physicians, Herouard, and Guy de la Brosse, to establish the Jardin des Plantes. In 1739 the celebrated naturalist Buffon was appointed superintendant, and through his unwavering devotion to its interests many valuable additions were made to the garden, and many illustrious names, among whom were A. Petit, Faujas de St. Fond, Winslow, Fourcroy, and Daubenton, were placed upon the list of its patrons and contributors. During the Revolution, when the universities, the faculties of medicine, law, etc., were suppressed, it was feared that the garden would suffer from the proscription, but as it was looked upon as national property, open to all classes of visitors, and intended for the culture of medicinal plants,

and the laboratory to be a manufacture of saltpetre, it was untouched. Throughout the Reign of Terror the garden was greatly neglected and crippled for the want of funds.

In 1814–'15 it was again endangered by the foreign troops; it was protected, however, by a special convention. Since that time the institution has been supported by the liberality of the State; large sums are annually voted for both the professors and pupils, the former of which are almost constantly occupied in and about the gardens, cabinets, lecture-rooms, and museums, and about eighteen hundred students annually listen to the courses of lectures delivered within the amphitheatre, laboratory, &c.

The garden is under the control of the Minister of the Interior, and consists of—1st. A botanical garden, with spacious hot-houses and green-houses. 2d. Several galleries containing collections, scientifically arranged, of the different kingdoms of nature. 3d. A gallery of comparative anatomy. 4th. A menagerie of living animals. 5th. A library of natural history. 6th. An amphitheatre, laboratories, &c. The lectures are all public and gratuitous; they begin in April and continue to the latter part of autumn; they are delivered early in the morning, and embrace various subjects connected with science. The amphitheatre is capable of holding twelve hundred persons. The number of species of plants cultivated in the botanical department is upwards of 12,000. Baron Cuvier arranged the cabinet of comparative anatomy, which I suppose surpasses any other in the world. Upon the first floor are the skeletons of the whale tribe; various marine animals; skeletons of every variety of the human species; skulls ranging from those of the lower animals up to man; large numbers of rooms up stairs are devoted to the dissections of fishes, reptiles, and birds, and some specimens of the human body. There are detached bones for the use of the students; series of the large bones and vertebræ of different animals; skeletons of quadrupeds; skeletons of birds, reptiles and fishes; series of teeth, commencing with those of the horse and ending with those of fishes; larynx and trachea,

and hyoid bones of birds and quadrupeds. In phials are a series of brains and eyes; the bones of the ear of animals, from man to reptiles; a series of hearts of mammalia, reptiles and fishes; a wax model of the viscera of the hen, exhibiting the several periods of the formation of the egg; fœtal preparations of oviparous and viviparous animals; preparations of different orders of mollusca, zoophytes, articulated animals and shell-fish in wax. Besides these there are preparations of the muscles and viscera; skulls and casts of distinguished individuals; heads, in wax, by M. Calenzuoli, of Florence, representing the lymphatic and nervous system; fossil remains, &c.

In the Gallery of Zoology there is a collection of upwards of 2000 reptiles, embracing more than 500 species, divided into four orders; namely, chelonians, or tortoises; saurians, or lizards, comprehending crocodiles, etc.; ophidians, or serpents; and batrachians, as toads, frogs, &c. Also articulated animals without vertebræ, to the number of 25,000 species. The collection of birds is very complete, containing 2,500 species, and about 10,000 specimens. The number of species of fishes is the same, though there are only 5000 specimens; the number of mammalia is something like 500 species and 2000 specimens. Altogether the number of specimens of the animal kingdom is 200,000, and so beautifully and systematically arranged, that, beginning with the sponge, you may follow nature through her various gradations till she arrives at man.

The busts of Guy de la Brosse, Baron Cuvier, and others are in the building; a marble statue of Buffon also is in the gallery of zoology. The library, composed of works on natural history, has opposite its entrance a bust of Fourcroy; it contains 30,000 books and 15,000 pamphlets, but by far its most precious part are the manuscripts commenced in 1635, numbering now 90 port-folios, containing more than 6000 drawings of fruits and flowers upon vellum, and valued at two millions of francs.

There are in the mineralogical and geological gallery upwards of 60,000 specimens. The mineralogical collection

is divided into the four grand classes,—1. earths containing an acid; 2, inflammable substances; 3, metals; 4, earthy substances or stones. Of the first and last there are many beautiful specimens, among them a vase of the brecciated porphyry of the Vosges, a large group of crystals of colorless quartz, &c., numerous cups of chalcedony, lapis lazuli, &c., &c.

Among the metallic substances are a great many aerolites. In the collection of inflammable substances are some pieces of yellow amber which contain insects imbedded while it was in its liquid state; a series of diamonds, &c.

The geological specimens are large, and the collection of fossils very complete. Valliant founded the botanical gallery. The herbal contains upwards of 50,000 species. The two cabinets of the fungi in wax, which was presented to the museum by Charles X and the Emperor of Austria, is very perfect, and its value is set down at 20,000 francs. M. Brongniart has arranged a collection of fossil plants from the coal formations, which is scientifically done and very interesting.

Of the menagerie it is hardly worth while to speak, save probably to say that it affords the student of natural history every opportunity to study the habits of a very large number of animals.

There are no animals in the collection that attract such crowds as the monkies do. They are provided with a commodious circular building of wire, and go to the garden when you will there are always around this establishment a number of Frenchmen, women, and children, enjoying as much as the monkies do themselves their gambols, quarrels, courtships, and races. In a collection of animals so large as this it is not to be expected that all the specimens will be perfect or healthy, and many of the poor creatures look miserably enough. The snake tribe, whose apartments are warm and protected from vicissitudes of temperature, are in good condition. This is a mere skeleton of a description of the garden, about which a volume might be written; but for the present it must suffice.

M. Marchal de Calvi, of the hospital of Val-de-Grace, has been employing for some time past iodine in a new form. The iodine is dissolved in oil, in the proportion of 1 grain to 18 grains. He takes afterwards a certain fixed quantity of the solution, mixes it with gum in a mortar, and forms an emulsion.

M. Marchal commences by prescribing one grain of iodine, or eighteen grains of the oily solution. The dose may be gradually augmented to six grains. Notwithstanding so large a dose has been used no unpleasant effects have been produced on the digestive tube. The patients preserve their appetite, and digestion is performed properly. This new preparation has been used with remarkable success in many cases of scrofulous swellings of the glands that had attained very great volume. Iodine in this form remains for a much longer time in the economy than the iodine with potassa. In place of iodide of potassium, M. Marchal uses the iodide of sodium, because he thinks it more active, from its containing a greater equivalent of iodine than the preparation containing potassa.

Dr. Desmarres reccommends in strong terms an anti-ophthalmic ointment prepared according to the following formula:

℞ Red precipitate 2 ä 4 grains.
Pulverised camphor 3 grains.
Olive oil 1 drop.

Mix and pulverise with care for a considerable length of time, afterwards add of fresh butter which has been washed in hot water, 54 grains. Make a perfectly homogeneous ointment.

It is used with great advantage in chronic inflammation of the transparent cornea, improperly called ophthalmia, among scrofulous individuals. Dr. D. has also prescribed it with much success in cases of spots not yet organised upon the cornea. The mode of employing it consists in applying in the evening just before going to bed a piece of the ointment the size of a grain of wheat upon the free borders of the eye lids.

Before the Academy of Sciences at its meeting on the 21st of September, Dr. Legrand spoke of the *action of gold upon the digestive organs.* The preparations of gold he believes are often of signal benefit to correct the gradual enfeeblement of the digestive organs, in old persons, in cases where quinine had effected no good. He mentioned the case of a woman 87 years of age, who was suffering from extreme debility, loss of appetite, &c. Syrup of quinine had been tried without advantage. Dr. Legrand prescribed 5 grains of gold mixed with ʒiv. of apple jelly. In sixteen days the dose of gold was augmented from the third of a grain per day to five grains. In twenty-five days the patient had taken 54 grains of gold, and the good was very perceptible; she had recovered much of her strength, her appetite was restored, and her food was taken with pleasure. A suspension of the remedy led to a return of the indisposition. The medicine was again given in even larger quantities than before, and resulted in the permanent cure of the patient. More recently the author has used another preparation of gold in a man 63 years old, who had been debilitated by antiphlogistic treatment, with similar success. In this case the preparation in question was the perchloride of gold and soda, with the powder of iris, which was rubbed upon the tongue.

The Duke of Dondeauville, in Germany, announces that he has discovered a remedy for the bite of rabid dogs. It consists of several glasses, one only at a time, of an infusion made of a small quantity of euphorbia villosa, veratrum album, polygonum hydropiper, and helleborus vulgaris. The plants must be gathered in May, early in June, or in September. While the infusion is preparing, the wound is to be washed with vinegar and water. Besides the virtue of healing, this remedy possesses another which is even more remarkable; it detects whether the dog that inflicted the bite was really rabid. If he was mad, the third, or at most, the fourth dose produces violent vomiting; if not mad the remedy possesses no such power.

REVIEWS.

ART. V.—*The Writings of Hippocrates and Galen.* Epitomised from the original Latin Translations. By JOHN REDMAN COXE, M.D., Member of the Batavian Society of Sciences at Haarlem; of the Royal Medical Society of Copenhagen, &c. *Multa renascentur.* Philadelphia: Lindsay & Blakiston. 1846. 8vo. pp. 681.

Hippocrates is usually styled the "*Father of Medicine*," and it is the custom to regard our science as having originated with him. Few writers have thought worth while to go farther back than the age of this great man, to whom indeed we are indebted for nearly all that is known of what his predecessors did for the healing art. That they accomplished not a little in physiology, anatomy, materia medica, dietetics, and hygiene generally, is manifest from his own writings. Among the many books ascribed to him there is a treatise concerning "*Ancient Medicine*," in which the views of the physicians who had lived before him are unfolded. We learn from him that surgery was practised with a considerable degree of success in his day, and that a competent knowledge of many parts of the human body had been attained. It is therefore evident, that in exalting Hippocrates to the rank which he has so long held, we are doing great injustice to the laborers in medical science who preceded him. He deserves all the honor due to the faithful narrator of their achievements, but we cannot with any justice ascribe to him discoveries of which he is merely the historian. But

for his writings much of what was done by the earlier physicians would never have been known to succeeding ages: we are indebted to him for all that we know of the fabric of medical science in his day, and we have very naturally concluded that the fair temple was a work of his own building. But not even all the writings which pass under his name are supposed to be his; far the larger number are regarded as the productions of others, his agency consisting in having collected them into one body. Nearly seventy treatises are embraced in the "Writings of Hippocrates," of which only about twelve or fourteen are uniformly attributed to him. The others have been ascribed by his editors and translators to his son, his son-in-law, or writers who flourished anterior or subsequent to his times. His credit unquestionably is very great, but we agree with the present editor of his works, that whatever merit we may think fit to award to him, "we ought not so far to forget the other great men by whose means he was enabled to reach the pinnacle of fame, as not even to grant them a niche in that temple of which he was indeed the brightest ornament." Great as are our obligations to him they would have been greater, if he had taken pains to specify individually the predecessors whose works are now incorporated with his own in a way to render hopeless the efforts of annotators to distinguish between them. But in writing a notice of Dr. Coxe's epitome of the works of Hippocrates we had it in view not to criticise them, but to present such extracts from the various treatises as would convey to our readers some idea of the matter they contain.

The first section relates to the famous "Oath of Hippocrates," which Dr. Coxe thinks was written by some one who lived posterior to him. In this oath the pupil binds himself to regard his preceptor as a parent, and his children as relations; engaging to teach the science to them without a fee, as he would do his own, and that without a previous assumption of this oath he will teach the science to no one; promising to act faithfully towards the sick, prohibiting all that could harm them, and never prescribing poisons or rem-

edies for procuring abortion; vowing that he will never operate for the stone, but leave it to those who are devoted to it; professing to live a chaste and pious life, to observe profound secresy in his profession as to family transactions, to avoid all corrupt influence with either sex in the employment of aphrodisiacs; and in case he should act in opposition to the above, praying that he may neither live long, be successful in his pursuits, or become celebrated in his profession; but that if he scrupulously observe these rules, the reverse may be his destiny.

We copy the entire treatise on the *requisites* to constitute the accomplished physician, from which it will be seen that so early as the days of Hippocrates evils of which we still complain had come upon the profession. It is also manifest enough that this great philosopher entertained a sufficiently exalted opinion of his calling.

"Of all the arts, medicine is the most illustrious; but the ignorance of its professors, and that of those who judge of their qualifications, is the cause of its having been considered as among the most contemptible. This, in my opinion arises chiefly, from the circumstance, that medicine is the only profession, for which, in our cities, there is no penalty attached to such as ignorantly pursue it, beyond that of contempt. But ignominy scarcely wounds the ignorant. It is with them, as with the dumb performers of the theatre: they have the form, the dress, and mask of the real actors, but in nothing else do they resemble them. So we find many who are physicians in name and appearance,—but few who are such in reality. Six things are required to constitute a physician:—Natural talents; a good education; a competent instructor; early study, industry, and adequate time. The chief of these, is natural talent. In want of this, all is useless. But if this is possessed, the art may be acquired, by due attainments previously;—and by beginning to study at an early age, and in a proper place. We must, moreover, be industrious, and continue long in study, by which means the science becomes, as it were, natural—rapidly increases,—extends its researches, and brings forth mature fruit.

"The study of medicine may be compared to the culture of plants. Our nature or disposition is the ground; the precepts

of the teacher are the seed; commencing our studies early, resembles the sowing of the seed in a proper season; an appropriate location for the pursuits of study, resembles the surrounding atmosphere which affords nourishment and growth to the plant; diligence in study, is like the various means pursued to render the ground fertile; finally, the long continuance of our studies, resembles the period essential to full and perfect fructification.

"Those who fully attend to the above precepts, will attain to a true knowledge of medicine, and should every where be considered as masters of their profession, and not merely nominal physicians. They may come forward with confidence; whilst ignorance proves but a poor foundation, and an empty treasury at all times; the enemy of all confidence and trust; a source of audacity as well as of timidity—since timidity is the offspring of weakness, as audacity is of ignorance. Science and opinion govern the world: the one points out our knowledge—the latter our deficiency. Things of a sacred character should be unveiled to the pure alone; for it is sacrilegious to communicate them to the profane, before they have been initiated into the mysteries of science."

In the next treatise we have a defence of medicine against its calumniators. It is one the authenticity of which has been doubted. Medicine is defined to be "an art that cures the sick, or lessens their pains, and which has nothing to do with incurable diseases." To the objection of its enemies that the larger part of those who are cured owe it to good luck, and not to the rules of art, he replies—

"I have no desire to rob Fortune of her just rights, and therefore I must acknowledge that all who are well attended to, are very fortunate, whilst those who are neglected or illy treated, are extremely unlucky. But how happens it that those who are cured, should prefer ascribing it to anything rather than to art, when their cure has been actually accomplished solely by their having employed and attended to its rules? They did not commit themselves to fortune, but called in the assistance of art. Hence, they are in this respect altogether absolved from all acknowledgment of the former, but not so with respect to art. They recognise art, insomuch as they pursued its rules, and cannot deny its existence, when evinced in the effects it has produced.

"But it will be said, that many sick persons have been cured without the aid of a physician. Who doubts this? It is very possible, that without having called in a physician, they, nevertheless, have fallen into the arms of medicine. Not that they knew what medicine approved of, or disapapproved; but they happily employed the very means which a good physician would himself have made use of, had he been called to their assistance; and, it is a strong evidence of art and its powers, when those, who have no belief in it, yet owe their safety to its rules: for it is certain, that those who have recovered, without the aid of a physician, must have been cured, either by doing certain things, or by doing nothing. In fact, they have been saved, by food or by abstinence; by drinking or abstaining from drinks; by bathing or not bathing; by labor or rest; by watching or sleeping; or by an alternation of all these. Now, since benefit was obtained, they must of necessity admit, that there was something done, by which that benefit was obtained. On the contrary, if injury was sustained, it must equally have arisen from something. It is indeed true, that few are qualified to distinguish between what was beneficial or hurtful to them. He, however, who is capable of such a discrimination, and of justly appreciating the measures he may have adopted, will equally discover, that what has saved him, is, in fact, a part of medicine. Even the faults he may have committed, are not less striking evidences of the existence of medicine; for, that which benefited, did so, only on account of its timely employment; as, on the contrary, what was injurious, was so, only on an opposite reason. Now, wherever the good, or the bad, has its own peculiar termination, how can it appear that art has no existence? For myself, I think, that art can alone be absent, when what was done, produced neither a good nor a bad effect; and that, when either appears, the existence of art, is fully substantiated."

He takes an enlarged view of medicine, and so far from limiting its office to the administration of drugs, shows that it embraces whatever is calculated to affect the sick. He says—

"I admit, that if medicine and physicians effected cures by purgatives or astringents alone, our arguments would be weak;—but we see the ablest physicians cure diseases by re-

gimen, as well as by every other kind of remedies. Now, we must admit, unless we are ignorant, or deficient in understanding, that the employment of regimen, is a dependent on art. Nothing is useless in medicine in the hands of good physicians—we see various remedies, and cures in many instances, under the operation of nature, as well as through that of human industry; and such as have been restored without the aid of a physician, can in no respect attribute their recovery to chance, with any just foundation."

The *art of medicine in former times* is the subject of the fourth treatise, which is, as all the commentators agree, "learnedly and acutely written," but by most of them is not believed to be the production of Hippocrates. It points out the antiquity, invention, certainty, and importance of medicine. The errors into which a false theory had led many are indicated, and the writer goes on to add that—

"Recourse to hypothesis should therefore be avoided in medicine, and left to subjects obscure and doubtful, which afford nothing better to their advocates. Thus in astronomy, &c., however persuaded we may be of the truth of our opinions, yet we cannot establish them fully, so as to destroy completely the doubts of others, since there is no established rule of truth, to which we can at all times refer. Such a rule, however, exists in medicine; it is an art of long existence, of sure principles, and certain regulations, through which, for a long period, numerous discoveries have been made, and which are confirmed by experience, unmixed with hypothesis. Much is, however, still required to render it perfect, by the researches of the learned; and by the aid of what is already known, endeavor to obtain the knowledge of that we know not. All those who depart from well-established rules, to riot in the path of novelty, and boast of having discovered something in our art, deceive themselves as well as others. I shall endeavor to prove this, by pointing out what medicine really is; from which it will appear, that all deviation from its present route is to be avoided."

The reader will smile at the comparison here instituted between medicine and astronomy, and at the compliment to the superior certainty of the former. Truly, as remarked by

the writer, "much is still required to render it perfect," although two thousand years and more have passed away since he dwelt with so much complacency upon its antiquity and "sure principles."

The fifth treatise is intended to point out some short precepts and advice as to what is essential to the physician; and first as to his exterior. He ought to have "a healthy appearance, for otherwise the public will not believe that he is qualified to attend to the health of others. His dress should be neat, and his person clean and unperfumed, lest it might be supposed he employed perfumes to conceal some disagreeable emanation, that might be unpleasant to the sick."

"As to internal qualifications, he should possess much prudence; not that merely which prevents indiscreet or untimely conversation, but in all his concerns. His mode of life should be perfectly correct; for good manners and modesty contribute greatly to his reputation. He ought to possess circumspection and humanity: haste and assurance will be followed by contempt, although they may occasionally benefit him, for it is not always possible to avoid his services. They are at times useful, but rarely to be employed by the physician who desires to secure esteem.

"In regard to manners, he should be grave, without austerity, lest he should be considered proud or misanthropical; and he should avoid perpetual laughter and hilarity, for they are not at all times acceptable. In his moral character justice should predominate. It is at all times of infinite importance and especially in that intercourse that exists between the physician and his patients. These place themselves entirely in his hands; at all times, wives, daughters, and goods are placed at his discretion. Well then does it behoove the physician to be continually on his guard.—And thus much in regard to his mind and body."

The sixth treatise, which relates to decency in the manners and dress of the physician, has always been considered spurious, according to Haller, but is nevertheless the work of a philosophic mind, abounding in sound morality, and instructing the practitioner in all his duties. Thus early had

the inductive philosophy been embraced by some. "Instruction, to be beneficial," says the writer of this treatise, "*should be founded on facts.* Arts are deduced from reflection, but any reflections or reasoning, not accompanied by facts, evince that fault somewhere exists." This is worthy of Bacon, and shows how soon men began to perceive the futility of speculation. We err continually in ascribing great revolutions or discoveries in science and philosophy to single individuals. Thousands of years before Bacon's time, men had pursued the true inductive process. The following passage is admirable:

"It may be concluded then, admitting the truth of the preceding remarks, that knowledge and medicine must go hand in hand. The physician who is truly a philosopher is a demigod. Medicine and philosophy are closely allied. That which is taught by the latter, is practised by the former,—contempt of riches, moderation, decency, modesty, honor, justice, affability, cleanliness, gravity, a just appreciation of all the wants of life, courage in adversity—opposition to fraud and superstition, and due consideration of the Divine power. The physician is perpetually exposed to the hazards of incontinence, turpitude, avarice, intemperance, detraction, and insolence. How far these may influence his character, may be estimated by his conduct towards his patients, his friends, and families. In all these particulars, the appropriate connexion of wisdom and of medicine, is conspicuous; but particularly so in respect to the Deity, towards whom the thoughts of the physician must be perpetually directed; for the various accidents of life which come under his notice must compel him to acknowledge His omnipotence. He dare not ascribe to his art unqualified power, when he reflects on its frequent failure; even when success attends, it is to Heaven alone he owes it. We perceive now, how medicine leads to wisdom. They, even, who disbelieve in Providence, are compelled to recognise it in their examination of what takes place in the system, in the change of forms produced, and of the cures, both surgical and medical, from operations, or from internal remedies, and good regimen. These are considerations of extreme importance.

"Besides what is said above, something more is wanting to the physician. This is urbanity. Austerity, repulsive to

those in health, is much more so to the sick. He must carefully avoid exposing his body too much, or discoursing with the bystanders beyond what is absolutely necessary. A good physician avoids all measures that are not conducive to the welfare of the patient; he adopts nothing that is singular or inefficient."

* * * * * * *

"Previous to seeing the sick, he should consider what he may find it necessary to do,—for it is assistance that is needed, and not speculation. Experience will enable him to foresee what may take place; this gives him credit, and is always very difficult. On entering a sick chamber, he should pay attention to his mode of seating himself, the arranging his dress (mantle); he should talk but little, and neither be disturbed himself, nor trouble others. Address the patient cautiously, and let his own remarks be calm, even if agitation and apprehension exist around him. By this he will show that he knows what is to be done on the existing occasion. He then may give his directions, and mention his opinion, as to what further may ensue."

The next treatise comprises the 'Precepts of Hippocrates,' and though confessedly a spurious book, Haller assures us that it is by no means an unimportant one. Its beginning and close appear to have been borrowed from Hippocrates, "to whose brevity and gravity" the critics conceive that it "approximates." It imparts advice to the physician relative to his fees, his remedies, and food, treats of consultations, and denounces the impudence of quackery. "In short," as remarked by Dr. Coxe, "like the preceding treatise, it contains many general precepts that are well calculated to excite reflection in a philosophic physician, and to prove useful to him." Take the following as an example:

"No difficulty should be made at receiving information from the most illiterate, provided it appears that they have some knowledge of the subject under consideration. It was thus, I think, that our art had its origin; collecting together from all quarters, a body of facts. We ought not to neglect what chance may present, especially if it be reiterated; listening with attention in order to profit, and not repulsing our informant, by boasting of our cures, and deeming his experi-

ence void of utility. Doubts as to remedies spoken of as if alone appropriate, are highly proper. This does not imply obstinacy; all diseases, from a variety of circumstances require at times a difference of treatment."

We suppose every medical man will assent to the truth of the first proposition contained in the following extract, however odd the practice alluded to in the second sentence may appear to him.

"A point deserving of attention in medicine, is respecting the fee of the physician. If he commences by speaking of payment, the patient will presume that he will not be neglected. By not attending to this, he will be led to imagine that your attendance will be irregular. I apprehend therefore that a stipulation as to this particular is perfectly correct, except in cases of an acute nature. Here, the rapidity of the disease admits of no delay; and humanity will lead the physician to think more of the esteem he may acquire, than of mere profit. It is far preferable in such cases to bear the ingratitude of those you preserve, than to stipulate for payment whilst the patient is in danger. It is true, some persons who under the pretence of the hospitality afforded, or the facility of cure, object to payment. Such are worthy of contempt alone. The sick should be considered in the light of the shipwrecked mariner. And where is the real physician who will not rather faithfully afford his services, than act with inhumanity and rigor? Wherefore, when you have made yourself acquainted with the disease, pursue a regular mode of treatment, and neglect nothing that may prove conducive to a cure. Your views as to payment should be moderate, yet sufficient to recompense your labor, without however despising wealth. And with respect to the poor, to visit them gratuitously; preferring thus the pleasure of a grateful mind, to the increase of pomp and parade. Strangers and the poor demand peculiar attention from the physician, for no one can have a proper regard for medicine, who forgets his duty to his fellow-creatures."

In all ages the complaint of physicians has been the same —that the value of their services is not recognised. So we find it was in the days of this ancient writer; so we find it in

our own times. Men fly to us in the hour of danger, and "are exuberant in their professions and promises," but on the return of health these are forgotten. As expressed in the book before us—

"If, now, you would institute a comparison as to the ingratitude of patients, it will be seen that for the most part all are deficient in a due recognition of the services of the physician. The poor, at first, are mild and obedient, but ingratitude and ill behavior too often succeed. The affluent, in sickness, are exhuberant in their professions and promises; but in health, when reminded of payment, they excuse their neglect by their rents not being received, and then think no more on the subject."

The next treatise introduced to his readers by Dr. Coxe is the *book of prognostics*, which, we are informed, is uniformly considered one of the genuine writings of Hippocrates. So valuable did it seem to some of his editors, that they exhorted all physicians to commit it to memery. One of them thus expresses himself concerning it—

"It is unquestionably one of the most precious of the writings of the father of medicine. In it, the physician will find the foundation of the whole doctrine of crises, of urines, expectoration, hemorrhages, abcesses, &c., and everywhere a master's hand is apparent, so that it appears perfect and complete. Such is not the case with the aphorisms,—and I think every physician would find it useful to commit it to memory. Its brevity is its principal defect. It is nevertheless highly probable, that many of our present race of doctors will ridicule many things that are to be found therein, more especially the statement relating to urines; for it is now beneath their dignity to examine the urine of the sick, or even their expectoration for the most part! My own constant observation of the urine, preserved in glasses for inspection, has confirmed me in my opinion of the correctness of the Hippocratic doctrines. In respect to the pulse, which Hippocrates attended to but in a very slight degree, I think we err in depending so much upon it to the exclusion of those particulars almost entirely, in which he had the greatest confidence."

The following extract contains a description of the *Hippocratic countenance:*

"In acute diseases, the first thing to be noticed is the countenance. Does it look like that of health? especially is it perfectly natural? The more it differs therefrom the worse. A sharp nose, hollow eyes, temples collapsed, the brows knit, ears cold and contracted, and their lobes inverted, the forehead hard, dry, and tense, the whole countenance pallid, greenish, black, livid, or of a leaden hue. If at the *commencement* of disease such is the aspect, without other accompanying symptoms, in order to form a right judgment, it will be proper to inquire whether it may not depend on excessive want of rest, on violent purgation, or even on want of food. In either case, the state of the countenance is of less consequence, and the disordered system may be restored in twenty-four hours; but if it arises from other causes, and does not change in that space of time, we may safely affirm that death is not far distant."

Hippocrates had observed that patients with diarrhœa, or under the influence of a purgative, often sleep with their eyes partly open; except in such cases he deemed the symptom a bad one, usually portending death.

His prognostics, founded as they are upon observation, continue to be the experience of physicians, and are so clear, precise, and faithful, that it would not be easy to improve upon most of them. What, for example, could be more true than the following?

"With respect to the *decubitus* of the patient, that situation is best, that approaches nearest to that of health—as lying on the side, with the arms, neck, and legs slightly bended, with a gentle moisture over the surface? To lie on the back, with rigid neck and limbs is bad; but if the patient slides from the pillow towards the foot of the bed, it is infinitely worse. The feet uncovered and cold, the legs, and arms, and neck the same, and in continual jactitation, are symptoms indicating great anxiety. Sleeping on the back, with the mouth constantly open, and the legs strongly interlocked, is fatal. Lying on the belly, if unusual in health, is

symptomatic of delirium or severe pain. Sitting upright at the acme of the disease, is bad in all acute cases, but in pulmonic affections, indicates the greatest danger. Gritting of the teeth in fever, unless it be a long existing habit, is a sign of approaching delirium and death: if occurring in the state of delirium, it is fatal.

"*Sores*, both old and recent, should be noticed. If the disease is mortal, they become livid, dry, or pallid, and quite dry shortly before death.

"My remarks as to the *motions of the hands* are the following. In acute fevers, pulmonary inflammation, phrenitis or headache, if the patient moves them before his face, to and fro, as if catching at flies or motes, or picks the bedclothes or the walls, his state is desperate.

"*Frequent respiration* denotes pain or inflammation above the diaphragm; deep and very slow respiration announces delirium; cold expiration from the nose and mouth is mostly a fatal sign. An easy breathing in acute diseases, with fever which terminates within forty days, is very salutary.

"*Sweats* are beneficial in all acute diseases, if they occur on critical days, and remove the fever. Likewise when they are universal, and do not weaken the patient: otherwise they are injurious. Cold sweats, or, if limited to the head, the face, or neck, are bad; and if associated with violent fever, indicate death. If the fever is moderate, they indicate a long disease. If they form in drops, like millet seed, about the neck only, it is bad; but if universal over the body, it is a favorable symptom. Sweats arising from debility, or from violent inflammation, are never salutary."

We cannot say so much for the philosophy of the Father of Medicine. When he leaves the region of fact and approaches the borders of theory, he betrays a weakness common to men—his speculations are flimsy, and oftentimes most absurd. Thus, in the chapter on humors:—

"We must consider if the patient be accustomed to work, or inactivity; notice his sleep and watchfulness; if easily excited or depressed, and if such influence is partial or universal, or the result of the measures adopted. Also, if at or near the increase of the disease, or at its decline, and if the feet are cold. In periodic complaints, during the access, we

must not give food or force it upon him. At the crisis, and even a short time before, nothing should be done, but leave all to nature. After concoction has taken place, then we may act; never whilst the humours are crude, or at the beginning, unless by their force they tend to discharge themselves, which is rarely the case. When necessary to evacuate, effect this through those channels to which a tendency is evident. The utility of evacuations is not to be estimated by their quantity, but by their fitness, and by the relief they afford. When it is necessary to induce debility and faintness, this may be effected by derivation, or by drying up, or moistening, as the case may be, that is, if the patient can bear it. This is known by parts naturally dry, becoming hot, and those that are moist, becoming cold. Alvine discharges are here generally to be restrained. If the disease is periodic, and well marked by exacerbation on uneven days, emetics are given,—and purgatives on even days; for we find spontaneous evacuations useful, unless the exacerbation occurs on even days,—in which case the treatment is to be reversed. Such, however, seldom occur, and with difficulty is a crisis produced. If such a type continues for any time, as for instance if the increase is well marked on the thirteenth or fourteenth day, then we should purge on the thirteenth, and vomit on the fourteenth, by which a crisis is assisted. In such as extend to twenty days, besides the regular stools, copious purgation should be employed before the crisis."

And again, on the same subject he says,—"In summer bile is produced, and blood in spring, and thus of the other humors." In another place,—"Winter is a season of relaxation, and requires light nourishment and of easy digestion;" which is right in the face of all our chemical philosophy. The following, again,—"Humidity after extreme drought is promotive of dropsies on the coming on of rain, or when slight changes of the wind are apparent.

As a specimen of the aphorisms contained in the book on *crises* we subjoin the following:

"*Judgments of unexpected pains—Of dropsies—Of leucophlegmatia—Diarrhœa—Volvulus—Cephalalgia—Ophthalmia—Convulsions—Tetanus.* In sudden pains, with swelling of

the hypochondria, if the pains extend to the false ribs, bleeding and purging remove them; for fever will not attack with violence a weakened part. In dropsy, if the water finds a passage by the vessels to the intestines or bladder, a cure will result. A copious diarrhœa cures a leucophlegmasia. Such as are affected with a chronic diarrhœa, accompanied with cough, are not cured, except a severe pain in the feet attacks them. If any change in the nature of a disease is likely to happen, no diarrhœa attending, and merely flatus discharged, showing the absence of humors, you may safely administer what is proper for the patient. In iliac passion, give plenty of pure, cold wine, by small doses, until sleep, or pain of the legs ensue: fever or dysentery stops its progress. A discharge of pus from the ears or nostrils, checks headache in diseases. Whoever in health is suddenly attacked with headache, loss of speech, and snoring, will die within seven days, if fever does not come on. In severe and general headaches, apply cups to the upper parts.—Should pains of the ischium or knees, or asthma take place, the headache ceases. In ophthalmia, a diarrhœa is useful. In spasm or tetanus, a fever coming on removes it. In fever, if spasm occurs, the fever is arrested within three days. In spasm of the hands and feet, if mania occurs, if the vessels of the hands beat, the face full, the hypochondria hard and swelled, the disease will be tedious, but without convulsions."

The opening chapter of the book on *critical days* has the following caption: *What is essential to be known to the physician is here pointed out, to prevent his being deceived.* And yet physicians are, now and then, deceived, and, we fear, will continue to be to the end of time, notwithstanding the present translation of Hippocrates. Let us see what "essential" things are here "pointed out."

"I esteem it an important part of our art, to be well acquainted with the best writings that have reached us on the subject; for he who is thus informed and properly employs his knowledge, cannot, in my opinion, make many mistakes. Now, he should know the constitution of the different seasons of the year and of diseases accurately; and of diseases individually—the good or bad of each, either as depending on their own peculiar character, or on the existing state of

things; the sign that announces their duration and danger; of chronic diseases, which are salutary; and if acute—which are dangerous, which safe. He should know from these how to judge of the order of critical days, and to predict from them the event; and deduce his rules as to the proper regulation of diet, as to time, amount, and quality. It is of the highest import to the welfare of a patient in ardent fever, that the disease and everything connected with it, should be consistent with its nature; for what depends on natural laws, is salutary. A second and not less important circumstance is, the concurrence of the season with the disease; for the nature of man is not superior to the power of the universe. After this, we are to notice the general appearance of the patient; if the face is extenuated; if the vessels of the hands and in the angles of the eyes, and the eyebrows are quiescent, after having been previously active; if the voice is weaker and softer; the respiration less frequent and laborious than before;—in such a case, a remission will occur the following day; and hence the importance of attending to every circumstance connected with crises. Examine the tongue, whether its body or tip is furred or moist, and in what degree. If all these signs are but slight, a change for the better will occur probably on the third day; but if more strongly marked, the succeeding day, or even the same day, when they are of the highest grade. The white of the eye, moreover, is necessarily rendered dull when the disease is violent; when brilliant, it is a sign of health, and indicates its approach in proportion as its brilliancy is restored."

The first sentiment is excellent, and the only regret one feels in contemplating it is, that the great sage did not mention the names of the authors whose labors and celebrity he has unceremoniously absorbed. That he entertained a very high opinion of the wisdom of their teachings is evident from the latter clause of the first sentence. It is a matter of serious doubt whether many writers of the present day would hazard so favorable a judgment respecting "the writings that have reached us," or even those of contemporary authors.

The liver has had many sins to answer for in all ages of medicine. It has been made a sort of scapegoat for the ailments of every other organ of the body. If a patient la-

bored under fever, the liver was attacked as the seat of the malady. If he was afflicted with indigestion, the liver bore the blame. All obstructions were found in the circulation of the liver, and to unlock the hepatic secretions was the grand indication of cure. The pathology may claim all the veneration due to antiquity, for it goes back to the philosopher of Cos. In the annexed paragraph Hippocrates tells us what are tho "causes, signs, and symptoms of acute affections of the liver."

"Acute diseases originating in an afflux of bile to the liver, and tending to the head, proceed as follows: the liver tumefies, and is pressed towards the diaphragm; immediately headache ensues, especially at the temples; hearing and sight are diminished; and chills and fever come on. These symptoms are the first observed, and vary in intensity in different cases. As the disease progresses the pains increase; the eyes wander and become obscured; if the finger is presented to them it is not perceived, as may be concluded from their not winking at its approach; yet the patient appears to see something, for he picks the bedclothes as if catching bugs; and in proportion as the liver presses against the diaphragm, he becomes delirious, thinking he sees snakes and wild beasts around him, or soldiers fighting with him—talking at the same time in terms, as if this was truly the case. He strives to escape, and threatens those who oppose him. If raised up, his legs fail him, and he falls down; his feet are constantly cold; and when sleeping he starts, and has horrid dreams, as may be presumed from his waking suddenly in a fright; and when recovering his recollection he details his dreams, which correspond with his actions and talking during sleep. Such is his sufferings; at times he is speechless for twenty-four hours; his respiration rapid, and elevated; his reason returns at the ceasing of his flightiness, and he replies consistently to any question, and understands every thing that is said, but almost immediately relapsing into his preceding condition. Such affections are more common in long journeys across deserts, but are not confined to these."

Error, it has been said, walks in a cycle and reappears at intervals. Why Hippocrates referred this train of symptoms

to "an afflux of bile to the liver," it would not be easy to divine; but it should be remembered that he had not the scalpel with which to verify or disprove his hypotheses. With all the aids of modern science we have been enacting over again the same absurdities. Hippocrates laid down the principles of a sound philosophy but forgot them when he began to speculate concerning disease. Bacon established these principles, but nevertheless was a believer in charms and alchemy.

We turn next to the book on the *nature of man.* The philosophers of our sage's time held all matter to be composed of four elementary substances; namely: fire, air, earth, and water. Some contended that man was composed of one, and some of another, but Hippocrates insists that he is not made up of any single element. 'As to my own views,' he says, 'I affirm, that if man was constituted of only one species of matter, he could never feel pain; for how could pain be excited in him, if simple and uncompounded?' And he proceeds to assign strong reasons for believing, that he is not 'constituted of blood' alone, nor yet entirely of bile, or black bile, or pituita, but of all in part, and that each one prevails at particular seasons and under peculiar circumstances. 'If a man's throat is cut, the blood first flows out very warm and red, then mixed with pituita, and lastly with much bile.' He continues—

"Pituita abounds in man more largely in the winter, since it is the humor that has naturally the greatest analogy with that season; for of all the humors it is the coldest, of which we can easily satisfy ourselves. If you successively touch pituita, bile, and blood, the first will be found the coldest; it is more viscid, and combines with difficulty with atrabilis. It may be said, that everything that is viscid and yields with difficulty, is, by the force employed for such a purpose, rendered hotter, although this is no argument against the actual frigidity of pituita. That it does augment in winter is very clear, for we cough up and discharge it largely at that season; besides which, it is during this season that œdemas and other pituitous swellings chiefly make their ap-

pearance. In spring, although pituita is still abundant, yet the blood increases, the cold recedes, and showers occur. The blood therefore ought to increase, both from the augmented humidity and from the increasing temperature, which are the natural concomitants of this season; and a proof of my position is, that men are more liable to dysenteries and epistaxis, and are hotter and higher colored at those seasons. In the summer, the blood still abounds, but bile augments and extends into the autumn, the blood diminishing, since summer is contrary to its nature. The bile evinces its existence in the summer and in autumn, both by its spontaneous vomition, and by its copious discharge through the means of purgatives. It is equally shown, by the character of autumnal fevers, and by the color of the skin. Pituita in summer is greatly weakened, for that season being hot and dry, it is naturally opposed to its presence. The blood is smallest in production in the autumn, for this is the dryest season, and already is the system becoming colder. And now the atrabilis predominates, both in power and in quantity. As winter approaches, the atrabilis is refrigerated, and is less abundant; whilst pituita resumes its station and extent, in consequeuce of abundant rains, and the greater length of night. The human body has, therefore, constantly, all of the above humors; but they increase or diminish, each according to the season, as it may be conformable or otherwise to their nature respectively. As, throughout the year, there is always present both heat and cold, dryness and moisture, and as nothing in nature could for an instant subsist without their presence; if one alone was wanting, universal destruction would be the result; for the same law that subserved the creation of all things, is equally required for their preservation. It is the same with man; if one of those things that are essential to his constitution, were destroyed, he could not possibly exist. During the year, winter, spring, summer, and autumn, alternately predominate. In man, it is the pituita, or blood, or bile, or atrabilis, that successively hold the sway, as is evident from the operation of the same remedy on the same individual in the four different seasons of the year. In winter the evacuations are most abundant in pituita; in spring they are more diluted; bile predominates in them in summer, and atrabilis in autumn. Now, this being the case, the diseases which increase in winter, ought to end in summer, as those that arise in summer should be arrested by winter, unless checked by a certain determinate periodicity. This regularity in their termination is elsewhere discussed. In regard

to vernal diseases, we must await their final termination in the autumn; as those of autumn may be expected to disappear in spring. Should they extend beyond the season of their usual termination, they will be continued through the year. The physician, therefore, in attending the sick, ought to observe what is predominant in the system, as it regards the body, and also the season of the year."

Further on we have his pathology of calculous diseases, thus:—

"They who expectorate much pus without any fever, or whose urine deposits a large quantity of purulent sediment unaccompanied with pain; such as have bloody stools, as in dysentery, or long-continued diarrhœa, as young people of about thirty-five years of age; all such are in a diseased condition, dependent on the same cause. They must have labored hard and worked much in early life; and then, suddenly ceasing from their active exertions, eating largely and of a quality different from what they have been used to, corpulence ensued, and a great change of their system must have resulted, so that no correspondence exists between their present and their former state. When any disease attacks them, as now constituted, they at first resist it, but they are slowly undermined. The evil penetrates the vessels, and a sanious and unhealthy fluid is discharged whereever opportunity presents. Should it occur in the intestines, a diarrhœa is induced, of a character, as to the discharges, nearly similar to the humor existing in the body. Finding a ready passage, it is not long confined to the intestines.—Should the collection tend to the thorax, suppuration ensues, and if the purgation is impeded, the matter in the chest putrefies, and is discharged as pus. When thrown upon the bladder, the heat of the part warms and blanches it, a separation of its parts take place, the lighter parts float above, and the thicker purulent parts fall to the bottom. It is on this account that in children we find the stone or calculus forming in the bladder, to the heat of which is superadded that of the whole body. In man its formation is less common, in consequence of their greater coldness."

We make one more quotation from this book; it refers to that subject so fruitful in speculation—fever, concerning the

cause and pathology of which every writer has his own cherished theory. Let the Coan sage be heard among the rest. His doctrine is that—

"Fevers most commonly proceed from bile. There are four species, independently of such as have their origin in pain, and differ from them. These four species are denominated, synocha or continued, quotidian, tertian, and quartan. The first arises from a superabundance of unmixed bile, and its crisis is rapid; inasmuch as the body is not refreshed by intervals of calm, but on the contrary, is heated by an excessive warmth, it must necessarily soon come to an end. The quotidian also proceeds like the continued, from too much bile, though of less amount than in it: it ends in a shorter time than the two last, but continues longer than the first, because there is less bile, and also because during the intermission the body enjoys rest, which in the synocha it does not. The tertian is longer than the quotidian, being produced from a smaller amount of bile; and inasmuch as the intermission is longer shan in the quotidian, so is the disease itself of longer duration. It is the same with the quartan, which is longer than the tertian, owing to its having less bile, which causes the heat; consequently the period of repose is longer, during which the body is cooled. The quartan, however, is peculiar, in having an excess of atrabilis, which renders its cure difficult; for atrabilis is the most tenacious of all the humors of the body, and that which is with the greatest difficulty evacuated. Now the proof that quartan fever proceeds from or partakes of atrabilis, is, that it is chiefly produced in autumn, and attacks principally those between twenty-five and forty-five years, the period of life in which atrabilis most abounds, and autumn is the season of the year best adapted for its production. If a quartan attacks at any other seoson and time of life, you may rest assured that it will be of short duration, unless some accidental circumstance should be conjoined with it."

Hippocrates is quoted by nearly every one who undertakes to write on the relations of disease to climate and locality, and yet it is evident that the observations of this author were limited to a few places, and therefore cannot have a general application. The following may serve as an example:

"A town exposed to the hot winds that blow between the rising and setting sun of winter, viz: from the south, and which are common to it, whilst it is protected from those of the north; such town has abundance of water, slightly saline, and arising necessarily in elevated places; hence they are warm in summer, and cold in winter. If the summer is dry, diseases are of short duration; but if wet they are of longer continuance. From the most trifling causes, wounds degenerate into eating ulcers. If the winter is cold, the head abounds with moisture and pituita, which fall upon the bowels and often induce gastric affections. The constitution of the inhabitants is in general relaxed. They are neither great eaters nor hearty drinkers, for they who have weak heads can never make stout topers, since wine readily overpowers them. Now the following diseases are there the most common. Women are subject to catarrhs, and many are barren, rather from disease than from nature; abortions are frequent. Children are subject to convulsions and suffocations, that are often confounded with epilepsy. The men have dysenteries, diarrhœa, and *epial* fevers,* eruptions like flea-bites, chronic fevers of winter, and hemorrhoids. Few pleurisies are there seen, or peripneumonies, ardent fevers, and other acute diseases; such cannot be frequent where the bowels are relaxed. There are moist ophthalmias, that are neither dangerous nor of long duration, unless a change of season renders them epidemic. After fifty years of age, they are exposed to a kind of humor coming from the brain, which, if arrested, brings on palsy, or affections from the rays of the sun, or colds in the head. Such are the usual diseases in the places I have described, independent of epidemics caused by a change of season."

Again he says with about as much truth—

"As to places looking to the west, and which feel no winds from the east, but are exposed to those from the north and south, their position beyond all others is most favorable to disease. The waters are not clear, because the morning air, usually surcharged with moisture, prevents their limpidity, the sun dissipating it only after it has advanced in its course. During summer, the early breezes cause an abundant dew,

* A species of continual fever.

whilst during the remainder of the day, the heat scorches and oppresses the inhabitants. Hence their complexion is bad, and they have little vigor; they are liable to every disease I have mentioned, without an exception; their voice is hoarse, owing to the air, infected with the miasmata of disease, and from which it is not purified by northern winds. Those which blow, are charged with moisture, for the western winds place the atmosphere in a state resembling that of autumn; and a town thus situated, therefore, partakes of all the inconveniences which the evenings and mornings bring with them. Such are the remarks I have to make as to good or bad exposures, so far as relates to the winds."

He held, that on the character of the *water* of a country chiefly depended the health of its inhabitants.

"Cold and frozen in winter, and disturbed, sometimes by snow or ice, they become a sorce of pituita and catarrh to those who employ them; they enlarge and indurate the spleen; they heat and constipate the belly; they cause a shrinking of the shoulders, the neck, and the face; the flesh seems to disappear in order to augment the spleen; hence men become thin although great eaters and drinkers; their belly is with difficulty discharged either upwards or downwards, so that they require powerful cathartics both in winter and summer."

We suppose the reader is satisfied with the precepts of the father of medicine upon these subjects. There are other topics embraced in this volume, to which let us now turn for a moment. Passing over a great many minor ones, we come to the book on Epidemics.

In his work on epidemics Hippocrates appears to the greatest advantage. He is here the historian of nature, and his descriptions will continue true to the end of time. He no longer philosophizes concerning disease, but relates the symptoms and the seasons under which it appeared. It is divided into seven books, the first of which contains a statement of the seasons for three years, as occurring at Thasus, followed by the rise of an epidemic which persisted for two years. He thus opens his account of the weather—

"In Thasus in the autumn, about the equinox, and under the Pleiades, the rains were great, continual, and soft, as when the wind is southerly. The winter mild, with southerly winds, and very little northerly. With these were greater droughts than ordinary, so that the whole winter was, in effect, like the spring. The spring was also affected with southerly winds, but yet was cold, and a little wet. The summer was for the most part cloudy and dry. The Etesiæ blew but little, faintly, and irregularly.

"The whole year being thus affected with southerly winds, and greater droughts than ordinary, early in the spring (from the former years being different, and affected with northerly winds) some few were attacked with burning fevers of a kind good sort, and a few other with hemorrhages, neither of which proved mortal. Swellings appeared behind the ears, in many on one side, in most on both, without a fever or any confinement, but in some with a little fever. In all they disappeared without either inconvenience or suppuration, contrary to the custom of such tumors from other causes. At this particular time they were naturally soft, large, diffused, without inflammation or pain, and went off universally without any visible signs. Children, young persons, adults, especially those who frequented the public places of exercise, were most subject to them. A few women were also affected. The greatest part had dry coughs, which were soon succeeded by hoarsenesses. Some again after a while had painful phlegmons upon the testicles, sometimes upon one, sometimes upon both. Some had fevers, others none; most of them trouble and fatigue enough: but with respect to the chirurgical part they did very well."

It is impossible to read the history of his cases without being struck with their resemblance, in many points, to the febrile diseases of our own times and country.

"Silenus, who lived upon the sea shore, near to Eualcides's was seized with a violent fever after labor, and drinking, and unseasonable exercise. It began with pain in the loins, a heaviness in the head, and a stiffness in the neck. His stools the first day were bilious, simple, frothy, deep-colored, and many. His urine black, with a black sediment. A thirst came on, with a dry tongue, and no sleep in the night. The second day, an acute fever. More stools, thinner, and frothy. Black urine. An uneasy night. Rambled a little.

The third, worse in all respects. A distension of both the flanks, reaching to the navel, but softish withal. His stools thin and blackish. The urine turbid and blackish. No sleep in the night. He talked much, laughed, sung, and could not contain himself. The fourth, no alteration. The fifth, his stools were simple, bilious, smooth, and greasy. His urine thin and transparent. His understanding recovered itself a little. The sixth, a little sweat about the head, the extreme parts cold and livid. Much tumbling and tossing. No evacuation by stool or urine. The fever acute. The seventh, loss of speech. No warmth in the extremities. No urine. The eighth, a cold sweat all over, with little, red, round eruptions, like pimples in the face, that remained without coming to suppuration. From a gentle stimulus of the belly a great discharge of thin, and as it were undigested fæces, with pain; and what came away by urine was acrid and painful. The extremities a little warmer. Light sleeps, with a comatose disorder. Loss of speech. Thin transparent urine. The ninth, no alteration. The tenth, drank nothing. A coma, with light sleeps. From the belly, the same discharge as before. A great deal of thick urine, that came away gushing, and afterwards let fall a white sediment, like ground barley; the extremities cold again. The eleventh, he died."

The following is a case of fever supervening upon the puerperal state:

"In Thasus, Philinus's wife was seized with a fever and shivering, the fourteenth day after her delivery of a daughter, her affairs going on very well, without any reason for complaint in other respects. The upper part of stomach, the right hypochondre, and her private parts grew painful from the first. Her cleansing stopped. However, by help of a pessary she grew easier; but the pain in her head, neck, and loins remained. She could get no sleep; was cold in her extremities; and a thirst succeeded. Her belly was in a manner burnt up, and discharged very little. Her urine was thin, and without color at first. The sixth, she was very delirious at night, and then came to herself again. The seventh, was thirsty; and her stools were bilious and deep-colored. The eighth, a shivering came on, with an acute fever, and many convulsions followed, with pain. She also talked

much out of the way; got up to receive a suppository; had a great discharge downwards of bilious matter; but no sleep. The ninth, was convulsed. The tenth, came a little to herself. The eleventh, slept, remembered every thing, but in a little time grew lightheaded. After the convulsions made a great deal of water in a little while (the servants, or those about her seldom reminding her), of a thick and white kind, like what appears upon shaking water that has subsided after standing a long time, but no sediment; in color and consistence like that which is made by a beast of burden, so far as I saw. About the fourteenth she trembled all over, talked much, and came a little to herself; but soon became lightheaded again. About the seventeenth, lost her speech; and the twentieth, died."

In the case subjoined the result, after a very protracted illness, was favorable, although the subject, like the preceding, had to contend with all the disadvantages of childbirth.

"Epicrates's wife, who lived by Archigetes's, just before her labor, was taken with a violent shivering, and could not grow warm again, as I was informed. The next day, she was much the same. The third, she was delivered of a daughter, and every thing went on well. The second day after the birth an acute fever seized her, with pains in the pit of her stomach and private parts, which were mitigated by a pessary; but a pain in the head, neck, and loins continued, without any sleep. Her stools were small, bilious, thin, and simple. Her urine thin and blackish. The sixth day after she had been taken, at night she grew delirious. The seventh, was worse in all respects; watchful; delirious; thirsty; and had bilious, deep-colored stools. The eighth, shivered, and slept much. The ninth, no alteration. The tenth, a pain in her legs and the pit of her stomach again, with a heaviness in her head, but without a delirium. She slept more, but had no stool. The eleventh, the urine was better colored, and the sediment large. She felt herself lighter. The fourteenth, shivered again, and was very feverish. The fifteenth, vomited bilious yellow matter, pretty often; sweated, and missed her fever; but at night it returned violently. Her water was thick, and with a white sediment. The sixteenth, worse again, rested badly, got no sleep, and was lightheaded. The eighteenth, was thirsty, and the tongue

burnt up. No sleep; much lightheadedness; pain in the legs. About the twentieth, betimes in the morning, shivered a little, and was comatose or stupified; slept quietly; vomited a little bilious black matter; and grew deaf at night. About the twenty-first, a pleuritic pain came on quite through the left side, with a gentle cough. The urine was thick, turbid, reddish, and did not subside after standing. In other respects she was easier, but not without her fever. Her throat was inflamed and painful immediately from the first; the uvula was contracted; and the rheum remained sharp, biting, and salt continually. About the twenty-seventh, the fever left her; the urine broke, but the side was painful. About the thirty-first, the fever came on again; her stools were bilious and stimulating. The fortieth, she vomited a little bile, and was entirely freed from her fever the eightieth."

The next history we shall quote is short but graphic.

"Erasinus, who lived by the Torrent of Bootes, grew very feverish after supper, and had a very bad night. The first day he was easy, but in pain in the night. The second, worse in all respects, and at night lightheaded. The third, uneasy, and very delirious. The fourth, exceeding ill, and had no sleep at night, but dreamed and talked, and was afterwards remarkably worse, frightened, and impatient. The fifth, betimes in the morning, was composed and came perfectly to himself, but before noon was so raving mad, that he could not contain himself. His extreme parts were cold, and somewhat livid; his urine stopped; and about sunset he died."

We are sure that these cases will be read with interest, and it is not from any fear of wearying the reader that we forbear to quote others, but because we have already devoted to the work nearly all the space we can at present devote to it, and some account remains to be given of the "Writings of Galen."

Galen has been styled, somewhat invidiously, perhaps, *fimbriam Hippocratis*, and as an "appendage" to this eminent man—"the first that ever wrote on physic to any purpose," it is proper that his lucubrations should follow as an

appendix to the volume, which conveys to the English reader the fullest account yet given of the works of the Father of Medicine. But, no "fringe of Hippocrates" seems the Roman physician and author in the eyes of the American editor of his works. Far otherwise. His writings, in Dr. Coxe's judgment, constitute "the proudest work of which the science of medicine can boast, either in ancient or modern times, if estimated by their individual merits alone," No; "Galen was no slavish and ignoble plagiarist." On the contrary, continues the editor—

"In thought, as in action, he appears to have been free: and those thoughts are evincive of superior genius, improved by all the arts and science of his own, and of preceding ages. In every page, his character stands forth in bold relief. His works are a library of past events, an encyclopedia of facts from every branch of medical literature; and forestalling many of the most extraordinary events of our own times; whilst even in experiments and in operations, *considered as novelties* in the present day, he has preceded them."

These writings are very voluminous, amounting to "nearly seven hundred books or treatises," and covering the whole field of medical science. Dr. Coxe gives a short account of many of these, but we have not the pleasure of hearing Galen speak for himself, as Hippocrates was permitted to do. It is rather a table of the contents, than a translation of his works. It gives one a pretty good idea of the prominent subjects discussed by this writer, and of the leading doctrines inculcated in his works, but it is not so much the works of Galen, as a notice of them. The following extract is a specimen, in which the editor, besides informing us what the book contains, claims for Galen the honor which has been so long awarded to Harvey.

"The intent of this book seems to be, to show that the use of the pulse is that of preserving innate heat, and of conveying the animal spirits to every part. Now, although the language employed may give a different aspect to our present views

on this suject, and that of the circulation, yet I apprehend the doctrine of a circulation is adequately sustained. The influence of ventilating the blood and of cooling it, as has been previously noticed, is here adverted to, and the *abstraction* of something noxious from it seems clearly expressed. In fact, except in name, we can almost exclaim, Mutato nomine, de te narratur; for this abstraction of noxious matter, is the present decarbonization of the vital fluid.

"Physicians and philosophers alike concluded, p. 867, that respiration and the pulse both tended to one end, or subserved the same intention. Of this Galen affords proof as well as that the heat of each part is maintained, by the pulse. He mentions the fact, that on opening the ventricles of the heart of an animal, especially the left one, if the finger is immediately introduced, the heat is there felt to be greater, and continues longer than in other parts. He advances several reasons, and some experiments, to prove that the heat flowed from the heart—such as tying the vessels; and he thinks both arteries and veins are engaged in this (p.870); and from all he says, he deduces the connexion between the pulse and respiration, and speaks without ambiguity of the union of the arteries and veins. If in this book, the *candid* inquirer cannot find sufficient proof of a circulation being well known to Galen, even if it be not exactly explained and elucidated, as in the present day; and that, moreover, scarcely one fact or proof is adduced by Harvey that is not equally asserted by Galen; I must confess that I have greately misunderstood the tenor and intent of all his pages, which go to prove that his *actions* depended upon such a knowledge and belief; as well as from his necessary conviction of the absolute necessity of such a function to every part of the system, (see p. 872,) in which is to be found, that man is included in the question there considered, and by which he is led to the following conclusion, "et cum semper vacuatas cum arteriis venas deprehendissemus, *veram esse sententiam de communibus* arteriarum et venarum *osculis*, et communi de una in alteram *per ea* transitu, *nobis persuasimus*," &c. This junction of the arteries and the veins, seems to have been a prevailing doctrine, equally, as that the arteries derive their power from the heart, and communicate with every part of the body. This communication between the arteries and the veins, is not so luminously explained by Harvey; for it was never understood by him, and he died in uncertainty, whether that communication was *direct*, by anastomosis, (as sustained by Galen,

and as proved by microscopic observations,) or *indirect*, by an intermediate effusion from the one, and an absorption by the other; yet Harvey is regarded as the *full* discoverer of the circulation, and all his predecessors are alike consigned to oblivion, nay, in many cases, to contempt and obloquy! A *complete translation* of the works of Galen would effectually prove the frauds that have been perpetrated, to support the honor of the British nation, which would be tarnished by the abstraction of those laurels that have been so unjustly awarded to a man considered as the glory of their country!"

Galen was also a discoverer in phrenology, according to Dr. Coxe, and attempted to "locate the mind." He was a believer in Aristotle's four elements, and supposed that disease was to be attributed to a deficiency or excess of some one of these elements in the system. His knowledge of anatomy enabled him to refute the opinion maintained by some of the ancients, that fluids in drinking passed into the lungs. He treated at great length of hygiene, and we make a quotation which relates to diet. It is from the third book, and is as follows:

"Animal food is considered in this book, and various articles derived from them, as eggs, milk, cheese, butter, blood, honey, &c. One chapter is devoted to wine. The animals mentioned are the hog, the ox, &c. The flesh of hogs so much *resembles that of man*, that, independently of dogs eating the last without suspicion, it was *sometimes served up by dishonest tavern-keepers.* Castrated animals most appropriate. General rules are delivered; the female ass and the mare were employed as food. We are then presented with the particular parts employed, among which are enumerated the udder, the thymus gland, the testes, which are considered inferior to the teats or udders, especially when these last contain milk,—the testes of the bull, goat, and ram, seem, however, to have been too much even for a Roman stomach; —the brain, the liver, spleen, lungs, &c., stomach, *uterus*, and intestines. We have a catalogue of animals, &c., derived from the fields, woods, waters, air, &c. Milk and its various preparations; asses' milk. A great variety of fish is mentioned; shell-fish, cartilaginous, scaly, and others. Salt provisions. We have, in short, in these books, a Materia

Alimentaria; consisting chiefly, as may be presumed, of the facts of the day; and which, devoid of the remarks of Galen, are not very interesting; yet, as affording a table of contents for the feasts of the Romans, they are not undeserving of attention."

And here we must stop. A very long article might be written on the subjects contained in this volume, and a very interesting article would naturally be looked for on topics so suggestive. We have made ours long enough, but we do not flatter ourselves that we have attained the other desirable point, and can only hope that the extracts will reward the reader for its perusal. We are free to confess that our slight examination of the writings of these medical fathers has not inspired us with any desire to go deeper into them. The fault may be in us, but we have not been so fortunate as to find in them those treasures of knowledge for which we should be willing to dig through the mass of rubbish under which they lie buried. Many interesting observations, doubtless, they contain—much that every medical man ought to know, but these constitute a very small proportion of the works; they are scattering grains of wheat mingled with a huge heap of chaff. Dr. Coxe has brought the profession under obligations to him by the task he has executed. In this epitome of the Writings of Hippocrates and Galen, the readers may obtain a glimpse of what the ancients discovered in medicine. Few, we presume, would incline to wade through their ponderous folios, even if presented to them in their own vernacular tongue. It may be that the world is not now producing such giants as these authors were; but pigmies standing upon their shoulders may enjoy a wider field of vision than they could command. We hope this book will be successful; by which we mean, extensively read, and we should suppose that the number of physicians is small who would not be pleased with an opportunity of learning how Galen and Hippocrates treated fever, and speculated concerning health and disease.

ART. VI.—*Chemistry of the Four Seasons: Spring, Summer, Autumn, Winter; an Essay principally concerning natural phenomena admitting of interpretation by Chemical Science, and illustrating passages of Scripture.* By THOMAS GRIFFITHS, Professor of Chemistry in the Medical College of St. Bartholomew's Hospital; Author of "Recreations in Chemistry," and "Chemistry of the Four Elements." Philadelphia: Lea & Blanchard. 1846. 12mo. pp. 451.

They greatly err who suppose that Chemistry is confined to the Laboratory. It is no technical science, limited to processes of art—to the preparation of medicines, the extraction of metals, to bleaching, dying, the manufacture of glass, the analysis and amelioration of soils—but a science wide in its scope and nature. It takes in all that passes in the four seasons, in air, earth, and water. In spring time the seeds are sown, and chemical changes, under the transforming influence of caloric, oxygen, and water, commence. The starch which they contain is converted into sugar and mucilage, their oil into carbonic acid; as they grow, carbonic acid again takes the shape of oil and sugar, and as their seeds ripen, the sugar returns to starch again. In their fruits changes occur by which bitterness and astringency give place to the saccharine principle. The *acer saccharinum* is tapped in the spring and yields a sap from which sugar is extracted. After a time the saccharine matter declines and sugar can no longer be crystalized from the juice of the tree; but molasses, or uncrystallizable sugar, may still be obtained. Finally the sweet principle is lost, and the tree exudes a sap abounding in mucilage. After a time this is transformed into leaves and woody fibre, and the tree is clothed in green.

Has the reader ever visited a great cave—the Mammoth, for example? If so, he has seen not only a vast labyrinth, but an extended laboratory, itself worked out by chemical action. There, in one part, he remarked water wearing away the solid rock, and in another depositing the limestone in stalactites of every strange, fantastic shape. At another point he found sulphate of lime, as snowy gypsum, covering

the ceiling with brilliant incrustations. Again, he saw sulphate of soda deposited upon the walls and floor; and close by found the crystals of sulphate of magnesia. From one fountain he drank water impregnated with sulphate of magneisum, and from another water containing sulphate of iron. By chemical agency the cave itself has been scooped out of the compact limestone rock, and this silent power is ceaselessly at work in its dark chambers, effecting new combinations, dissolving stone, creating new salts, crystallizing what was amorphous, rendering active what was inert.

These are examples. The book before us is full of such. It illustrates on every page the truth of our remark, that chemistry is no narrow science, confined to the laboratory and workshop. It is a book which will be read with pleasure, and is especially suited to the general reader. It does not profess to be competent to teach the adept in chemical science.

The following extract will convey an impression as to the subjects and style of this work, and will lead some, we should hope, to avail themselves of this pleasant guide to the study of the chemistry of nature.

"Upon tracing lignin as a chief constituent of the bark of trees, the chemist discovers another example of the power and goodness of the Creator.

"Lignin is an exceedingly bad conductor, and therefore only very slowly permeable by heat or cold; thus the covering of bark prevents the sap of trees from disturbance in its circulation by sudden changes in the temperature of the air, and secures it the degree most congenial to the performance of its vital functions.

"If the bark were not thus created of bad conducting material, trees and plants would suffer from the heat of summer, and the cold of winter; but more especially from the latter, as it would cause their death by the freezing of the sap, a phenomenon sometimes observed during a protracted and rigorous winter; but it can be prevented in many instances by enveloping the trunks of trees with a thicker coating of woody fibre, in the form of matting, or bands of hay and straw.

"When tropical plants are transported to cold climates, we artificially clothe them with similar materials to prevent them from suffering by the sudden transition, the same as we should endeavor to protect ourselves, by putting on an extra garment upon passing from hot to cold weather.

"By keeping a thermometer plunged in a hole bored in a sound tree during hot weather, it constantly indicated a temperature several degrees below that of the atmosphere; and during cold weather a temperature several degrees above that of the atmosphere: and another wonderful fact was also discovered, namely, that sap drawn from the tree would freeze at the same temperature as pure water, whilst the sap circulating in the tree, under vital agency, would not freeze until reduced seventeen degrees below the freezing point of water. This point or degree will claim our attention when considering the leading chemical phenomena of winter.

"It is a generally received and probably correct statement, that heat is evolved during germination,—heat quite independent of that which is popularly known to be evolved during putrefactive fermentation, as that of damp hay, damp corn, or organic manures;—the temperature of plants is very frequently materially above that of the atmosphere, 'and all have undoubtedly a power dependent upon vitality of maintaining to a great extent an equable temperature.'

"In summer and autumn the dense foliage of trees, by its extraordinary non-conducting power, forms the cool shade which at noon-day is so eagerly sought by man and animals from the piercing rays of the sun, and more particularly in oriental climates.

"The chemist discovers that the leaves of some very succulent plants will absorb oxygen in the dark, and again evolve it in the light; some kinds of the 'cactus,' for example, will absorb more than their own bulk of oxygen, and retain it so tenaciously, that they will not yield it by the action of heat, nor in the vacuum of an air-pump, but immediately do so upon exposure to the imponderable agency of solar light.

"No satisfactory evidence can be adduced regarding the physical cause of the circulation of the sap in plants, nor even of the general direction of its course; but the most accurate researches which have been made upon this recondite subject, render it probable that the chief ascent of the sap from the roots to the leaves, is in the vascular system of the 'alburnum,' and outer layers of wood; and that having performed its functions in the leaves, as shown at page 84, it

chiefly descends by the 'liber,' or inner layer of bark, giving rise to the formation of new wood, and to the separation of gum, resin, and other proximate principles.

"As regards the influence of flowers upon the atmosphere, it appears that they deteriorate it to some extent, and particularly during the night; but it is highly probable that much of the oppression which persons frequently experience after remaining in a conservatory, or room filled with flowers, is in the first place referable to the confined atmosphere being loaded with carbonic acid arising from the tan and soil; and in the next from the concentrated aroma of the flowers, and not from any material deterioration of air by their agency.

"Some persons are more affected by the aroma of flowers than others; thus a single hyacinth in a large room certainly cannot deteriorate the air in any appreciable degree, and yet its odor may be extremely oppressive, producing even headache and faintness.

"Few persons can bear an atmosphere loaded with aroma, whilst a little is occasionally refreshing; the same as a pocket-handkerchief saturated with otto of rose, soon palls upon the senses, though the first diffusion of its odor might have been grateful."

ART. VII.—*An Anatomical Description of the Diseases of the Organs of Circulation and Respiration.* By CHARLES EWALD HASSE, M.D., Professor of Pathology and Clinical Medicine at the University of Zurich, etc., etc. Translated and Edited by W. E. SWAINE, M.D., Physician Extraordinary to H. R. H. the Duchess of Kent. Philadelphia: Lea & Blanchard. 1846. 8vo. pp. 377.

From the preface by the editor we make two extracts, which will afford all the information concerning this much lauded work that we have, at present, space or leisure to give. He says—

"The following pages will not be found to contain a mere descriptive catalogue of curiosities in morbid anatomy, nor records of extreme or severe cases only, but a thorough anatomical and physiological account of the origin of disease, of

its progress through its several phases, and of its ultimate issue in death, in abiding organic mischief, or in recovery. The practical utility of this plan, apart from the truthfulness and ability with which it is carried out, few will be disposed to contest; for, to use the words of a highly distinguished physician of the present day,—'so far as morbid anatomy contemplates the last or latest results of disease that are fixed and irremediable, and unalterable, its value is very small. But so far as morbid anatomy contemplates *disease in progress*, and scrutinizes and explains its organic processes, its value is very great.'"

Dr. Hasse was educated at Paris and Vienna.

"On his return to his own university, Leipsic, he was appointed by my revered clinical instructor, Professor Clarus, to be assistant clinical teacher, and also pathological prosector at the principal hospital. With such means at his disposal, my friend forthwith commenced forming a pathological collection, which, under his auspices, has grown into a most interesting and valuable museum; and the present work is but a collateral result of the unwearied *practical industry* which he displayed in that undertaking, combined with a thorough knowledge of all that other observers had before achieved in the same field of science.

"Hence it will at once be seen that this treatise differs essentially from what is commonly called a compilation. The high estimation in which it is held in Germany, is clearly shown by the fact that, since its publication, Professor Hasse has had the offer of the chair of clinical medicine from no fewer than five universities. He has accepted that vacated by Professor Schönlein, at Zurich, and at present holds the additional rank of Rector of that Germano-Swiss University."

SELECTIONS

FROM

AMERICAN AND FOREIGN JOURNALS.

On the Use of Muriate of Barytes in the Treatment of Scrofulous Affections. By A. J. Walshe, M.D., F.R.C.S.I., &c. Dr. Adair Crawford was the first to call the attention of the profession to the use of this remedial agent in the treatment of scrofulous affections. There is a notice of it by him in the Medical Communications for the year 1789. He remarked that it combined the action of an evacuant, a deobstruent, and a tonic; that its incautious use was likely to be attended with a host of unpleasant and even dangerous symptoms, as loss of appetite, thirst, nausea, constipation, deafness, loss of sight, and paralysis of the voluntary muscles; to obviate this, he advises the use of a saturated solution, gradually increased from four to ten drops, as a dose.

He dissolved half a drachm in an ounce of distilled water, and gave from ten to fifty drops, according to age—that is, roughly from half a grain to three grains of the solid muriate. When he administered it to infants, he added a syrup to diminish its irritant effects; when the stomach was affected with spasm, he combined it with some aromatic or antispasmodic; he mentions that its activity in certain diseases of the skin is much increased by the addition of emetic wine, Plummer's pill and cicuta. In very delicate subjects, he exhibited it according to the following formula:—Muriate of barytes, muriate of iron, of each half a drachm. Water distilled, syrup of orange peel, of each an ounce. The dose of which is from twenty to thirty drops every three hours. Dr. Crawford has also recommended its conjunction with iron; indeeed, the solution of barytes, which he used in his first experiments, contained a minute proportion of iron.

The French physicians usually recommend a drachm of the salt to be dissolved in two pints of distilled water, of this a teaspoonful, that is about half a grain of the barytes is taken in a teacupful of infusion of hops, or some other bitter, every morning, fasting; this dose is gradually increased, its effect being watched with great care. The form in which I have usually exhibited it varies from that heretofore followed in being in pill. I at first exhibited it in this manner to avoid as much as possible the too speedy decomposition of the medicine in the stomach, and at the same time to prevent its being so rapidly absorbed as it would be in a fluid state. I have always commenced with very small quantities, one-twelfth of a grain three times a day, gradually increasing the frequency of the doses, rather than the quantity in each. I think it desirable that it should be taken after meals, so as to defend the stomach from its rapid action. With these precautions, though I must confess it was with some anxiety that I awaited its effects the first time, I have never experienced any inconvenience in its exhibition.

In that form of ophthalmia attended with great intolerance of light, so characteristic of the scrofulous form of this disease, Dr. Walshe has observed it very useful. He says, however,

I do not wish it to be understood as my opinion that muriate of barytes should supersede iodine in the treatment of scrofulous diseases, in which we frequently derive such eminent services from the latter, but I think I am warranted in inferring, after a careful examination of these cases, that there are some cases of scrofulous disease, in which iodine is useless, or may be worse than useless, and when we may derive considerable service from the muriate of barytes; and further, that there are some cases in which we experience beneficial results from iodine up to a certain point, beyond which, if it be persisted in, its beneficial action ceases, and it proves noxious. In these cases the treatment may be advantageously taken up with the barytes, and vice versa.—*Dublin Med. Press.—Braithwaite.*

Topical Employment of Cod-Liver Oil, in the Treatment of certain Strumous Affections.—By Dr. Brefeld. In cases of tumefaction of the lymphatic glands of the neck, axilla, and groin, this physician prescribes, with success, the employment of cod-liver oil in frictions to the inflamed and

painful parts. He says that he has observed that this topical medication becomes useless, when it is used with tumors which are the consequence of variola, scarlatina, or rubeola. In the case of scrofulous ulcers, consecutive to inflammation and suppuration of the lymphatic ganglions, he employs the following ointment:—Oil of cod-livers, 15 parts. Liquor of subacet. of lead, 8 parts. Yolk of egg, 12 parts. Make into a homogenous ointment.

We can, in the preparation of this ointment, replace the yolk of egg by an equal quantity of lard. This ointment may be applied to the ulcers, lightly, by means of a feather. In scrofulous ophthalmia, M. Brefeld smears, twice or three times a day, the margins of the eyelids, with pure cod-liver oil, which he applies by means of a camel's hair brush, or a feather. In scrofulous peritonitis, this practitioner rubs the cod-liver oil on the surface of the abdomen; and when the latter is painful, he recommends to warm the oil.—*Jour. de Phar.—Dub. Hos. Gaz.—Ibid.*

Bromine and its Preparations.—The very high price which iodine has attained within the last twelve months, has rendered it very desirable that a substitute should, if possible be obtained for this medicine, which is at present so extensively employed. Bromine and its preparations have been shown by the experiments of Majendie, Barthez, Brame, and others, to possess therapeutical properties as nearly as possible identical with those of iodine and the iodides. The scarcity, however, of bromine, and, consequently, its commercial value, has hitherto prevented its general employment as a remedial agent; but the recent discovery of it in large quantities in America has recalled attention to this substance as a substitute for iodine. Mr. O'Reilly, of this city, while lately in the neighborhood of New York, having had his attention called to the peculiar properties of the mother waters of many brine springs in the United States—the result of their evaporation for procuring common salt, found by experiment that they contained bromine in large quantities—nine drachms in every gallon. Having procured a large amount of bromine from this source, he has brought a hundred pounds weight of it home, and states that he can obtain an almost unlimited supply of it; the price at which it is now sold in

Dublin is eighteen pence an ounce, while the present price of iodine is three shillings and sixpence an ounce. These circumstances have induced us to include in our retrospect a short account of the doses and mode of administration of bromine and its preparations.

The forms in which it has been used on the Continent are, in the simple state much diluted, and combined in the form of bromides with potassium, barium, calcium, iron, and mercury. These preparations are made by processes exactly similar to those used for procuring the corresponding combinations of iodine. As a substitute for the tincture of iodine, M. Pourche has employed the following solution: bromine, one part; distilled water, forty parts; dose, from five to six drops in some aqueous vehicle, three or four times daily. For external use he employs a solution four times as strong as this. The bromide of potassium is very soluble in water, sparingly soluble in alcohol: the dose of it is from four to eight grains three times a day: to prepare an ointment from it, four parts are rubbed up with thirty-parts of lard; and if a stronger ointment, or one resembling the compound iodine ointment, be wished for, six drops of bromide are added to this. The bromide of barium is also soluble in water; the dose of it is from one to five grains, three times a day; the ointment is prepared by combining it in the proportion of one part to ten of lard. The bromide of calcium is prescribed in the form of pill made with the conserve of roses; the dose of it is from three to ten grains. The bromide of iron is a brick-red deliquescent salt, very soluble in water; it is not so easily decomposed as the iodide of iron, and is given usually in the form of pill made with conserve of roses and gum arabic; the dose of it is from one to three grains: it has been employed externally, also in the form of ointment, prepared with one part of the bromide to fifteen of lard. Two bromides of mercury have been used; the first a sub-bromide, is a white insoluble powder: the dose of it is one to two grains daily; the second, a bromide, is fusible and volatile, and soluble both in water and alcohol: its dose is one-sixteenth of a grain, gradually increased to one-fourth of a grain, daily.

All the preparations of bromine may be readily known from those of iodine by their not disengaging violet-colored vapors when concentrated sulphuric acid is poured on them. In France, bromide of potassium has been of late fraudulently sold for iodide of potassium, in consequence of the high

price of the latter; a sophistication of but little importance, if, as we are inclined to believe, the medicinal action of both be identical.—*Dublin Quarterly Journal of Med. Science.—Ibid.*

Stramonium Cigars.—Stramonium has for a long time been recommended as a remedy for asthma and other disorders of the chest, and it is frequently used in a pipe with a portion of tobacco. Mr. Butler, of Covent Garden, has recently introduced cigars composed of the leaves of this plant, and we have been informed by several patients who have tried them, that the plan is more convenient than the one formerly adopted, and that the remedy is quite as efficacious, if not more so. A short time ago, a caution was issued to chemists, to the effect that these cigars could not legally be sold without a cigar license, and on this account we have deferred our notice of them. But we are now informed that this objection is overruled, it being decided that the stramonium cigars may be sold without a license as a remedy, as no tobacco enters into their composition.

In France, not only stramonium but several other medicinal plants are used in the form of cigars; and we have been informed that advantage has been found to result from the practice in some cases.—*Pharm. Journal.—Dublin Medical Press.—Ibid.*

Treatment of Warts.—The hydrochlorate of ammonia dissolved in water, and the hydrochlorate of lime are the most certain means of destroying them; the process, however, in both instances is very slow, and demands perseverance, for if discontinued before the proper time, no advantage is derived.—*Eisenberg's Advice on the Hand.—Dublin Medical Press.—Ibid.*

Opium in Hemorrhage. By Dr. Griffin.—Of all the wonderful influences exerted by opium, that by which it sustains the powers of life when sinking from hemorrhage, and arrests the flow of blood, is the most extraordinary. When

after severe uterine hemorrhage the countenance is sunk, the eye hollow and glassy, the lips blanched, the skin cold, and the whole person corpse-like, when the pulse is almost gone at the wrist, when the beat even of the heart is scarcely perceptible, and stimulants, even brandy or rectified spirits, are either vomited or uninfluential, there remains yet one remedy capable of restoring the patient to life, and that is opium. I believe its power of saving life in these circumstances depends principally on its specific property of producing congestion in the brain. That amount of congestion by which it occasions apoplexy when given in large doses to persons in health, seems only sufficient to sustain the natural and necessary tension of the cerebral vessels in those who are dying of hemorrhage. Persons die in cases of hemorrhage, not so much from mere debility of the heart's action, as from the loss of nervous power in the brain consequent to it, and hence a fainting from which they are never awakened. The opium in such cases not only stimulates the heart's action, but restores a sufficient degree of tension in the vessels of the brain to prevent faintness, and by the judicious repetition of the remedy, life is preserved on the very borders of death. There are no instances in which opium can be given so freely or so fearlessly as in these. When the danger is imminent, five grains may be given at the first dose, and two or three every hour or half hour afterwards, until the pulse becomes distinct, the breathing easier, and tossing and flinging about in the bed is allayed. It is hardly necessary to observe, that in such cases, in conjunction with the use of opium, the administration of warm wine and brandy (however inefficient alone), and the application of heat to the extremities, are highly useful, if not absolutely essential.—*British and Foreign Med. Rev.—Ibid.*

On the Composition of Air at different heights in close Apartments.—Lassaigne has drawn the following conclusions from a series of experiments on this subject:

1. In rooms where the air is confined, and has been respired for some time without renewal, the carbonic acid expired is not found exclusively, as some have asserted, in the lower strata.

2. In accordance with the laws of physics, confirmed by experiment, the carbonic acid is nearly equally diffused throughout the whole volume of confined air which has been respired by a certain number of persons.

3. The slight differences observed would lead to the in-

ference, that the proportion of carbonic acid was, under these circumstances, greater in the upper strata, were it not that the differences may depend upon errors in the quantitative estimation of the gaseous components of the air.

4. These facts show the erroneous principles upon which some modern theories of ventilation are based: for it is clear that the *whole* mass of air which has been respired by many persons requires renewal, so that the vitiated air may be entirely expelled.

5. The uneasiness experienced from respiring the heated air in the upper part of crowded and badly ventilated theatres, is due rather to its rarefaction than to its chemical composition; for the latter is almost identical in the upper and lower strata. The acts of respiration are more (?) full and frequent when rarified air is breathed; hence certain physiological effects are induced which are not observed in the respiration of air at the common temperature.—*Lon. Med. Gaz.*, from *Comptes Rendus.—Am. Jour. Med. Sci.*

On the Blood in bodies killed by Strangling.—Ciccone made the following communication to the scientific assocoation at Naples. After he had observed that in persons destroyed by asphyxia, the quantity of fibrine in the blood is diminished, and that the circulation continues for some time after respiration has become suspended, he farther found that in cases where the respiration, as also the return of the blood in the jugular veins to the heart, had become prevented by a ligature placed round the neck, whilst the greater circulation, and hence also the metamorphosis of arterial into venous blood, which, although now imperfect, takes place in the capillary vessels, the blood accumulating in the jugular veins, that portion of this fluid which is above the ligature contains the normal quantity of fibrine, while in that which is below the ligature the quantity is diminished. This observation is thus far of value, that if the body has not been killed by strangling, and the ligature has not been applied until after death, these changes in the blood will not be found. At the same meeting Cappa detailed his experiments; he found that in ten strangled fowls, death was in six instances caused by asphyxia and apoplexy combined; twice by asphyxia alone; and twice by apoplexy alone. In the last cases, on the microscopic examination of the blood above the ligature, its corpuscles were found distended, and

generally without a central nucleus; some of them were elongated, and others again in conglomerated masses, while the blood corpuscles in all the other parts of the body presented their natural appearance. Where death had been the result of asphyxia alone, all these alterations in the corpuscles were, on the contrary, observed only in the parts of the body below the ligature; and lastly, where death had been caused by a complication of apoplexy and asphyxia, the alterations in the blood corpuscles could be seen in all parts of the body without distinction. The above test could therefore, in his opinion, be applicable only in the two first circumstances, viz: where death was from apoplexy or asphyxia alone, and not where it was caused by these two conjoined, which occurrence was by far the most frequent. Where death was the result of apoplexy, he had certainly seen the jugular veins thicker and more full of fibrin, and he had seen exactly the reverse where asphyxia had been the cause; but where death was accompanied with symptoms of apoplexy and asphyxia conjoined, this test was of no avail.—*Monthly Jour. Med. Science*, from *Annali Univ. de Med.*—*Ibid.*

Sulphate of Iron for Excessive Perspiration, prescribed in the following manner, is highly recommended by Professor Lippich:—

℞ Gray cinchona, 30 grammes, or nearly ℥j.
Water 300 " ℥x.

Boil for eight or ten minutes, filter and add

Sulphate of iron, 40 centigrammes, or about gr.vi.
Simple syrup, 30 grammes " ℥j.

Mix, to form a drink, of which a half coffeecupful is to be taken every two hours.—*Jour. de Chimie Médicale.*—*Ibid.*

Upas Tree.—The Dyak Darrat or Land Dyaks, seems to differ in no essetial particular of language or costumes, from the men of the sea, except in as far as depends on their inland position. The only remarkable difference of usage noticed by Mr. Brooke is, that the latter use and the former do not, the weapon called the *sumpitan*, or blowpipe, for shooting poisoned arrows. The wounds inflicted by these are curable, says Mr. Brooke, by antidotes known to the natives; nor are they re-

garded, apparently, with much terror. And we suspect the whole romantic history of the poisonous trees of the Indian isles must be banished with so many other marvels, to the province of legends, since a friend of Mr. Davidson, in Java, to prove their absurdity, climbed up an upas tree and passed two hours in its branches, where he took his lunch and smoked a cigar.—*Edinburgh Rev.—Ibid.*

Statistics of the Medical Schools of the United States for the Session 1845–'46.—

	Students.	Graduates.
University of Pennsylvania - - -	462	168
Transylvania University - - -	171	58
Medical Institution of Geneva College -	179	39
Medical Department Willoughby University	164	30
Albany Medical College - - -	115	42
Louisville Medical Institute - - -	345	73
Western Reserve College, (Cleveland) -	161	52
Jefferson Medical College - - -	469	170
Rush Medical College, (Chicago) - -	50	9
Harvard University, Boston, - -	180	31
College of Physicians and Surgeons, N.Y.	219	38
Med. Dep. University of the city of N.Y.	425	131
Ohio Medical College - - - -	192	46
University of Maryland - - -	147	40
Medical College of Georgia - - -	112	30
Med. Dep. of Hampden Sidney College	74	17
Med. Dep. University of Missouri - -	92	29
Med. Dep. Illinois College - - -		13
St. Louis University, - - - -	53	11
Med. College of the State of S. Carolina	210	74
University of the City of N.Y. - -	407	130
Indiana Medical College, (Laporte) -	71	17
Berkshire Medical Institution - - -	142	35
Medical College of Louisiana - - -	103	19
Pennsylvania Medical College - -	70	38
Medical School of Maine, - - -	73	19
Vermont Medical College, (Woodstock)		24
Yale College - - - - - -	53	19
Castleton Medical College - - -	140	36

American Jour. Med. Sci.

Address to the Medical Profession, in relation to the objects of the National Medical Association, by the Committee appointed for that purpose.

Abstract from the Minutes of the Proceedings of the National Medical Convention, held in the City of New York, in the month of May, 1846—

Resolved, That a committee of seven be appointed to prepare and issue an address to the different regularly organized medical societies, and chartered medical schools of the United States, setting forth the objects of the National Medical Association, and inviting them to send delegates to a Convention to be held in Philadelphia, on the first Wednesday in May, 1847.

In obedience to the above resolution, the committee appointed for the purpose present the following remarks to the members of the medical profession generally, as well as to the several bodies named in the resolution:—

In compliance with an invitation from the Medical Society of the State of New York, delegates from various medical societies and schools met in Convention in the city of New York, on the first Tuesday of May, 1846. About one hundred members were present, representing thirty-four different medical associations, and residents in sixteen different states of the Union. The object of the Convention was, by a concert of action of medical men from every part of the country, to advance the interests, the honor, and the usesfulness of the profession. The result of their deliberations, as shown in their published proceedings, has been widely circulated, so that all who take an interest in such matters, are probably fully informed of it; still, some remarks upon the course which was pursued, together with the reasons for it, may be appropriate.

The first object which engaged the attention of the Convention was the necessity of forming some plan of organization, by which medical men in every part of the country may communicate with each other, and act in concert, in regard to their common interests. The general opinion was, that this desirable object would be best attained by the formation of a National Medical Association, to consist of members from every part of the country, who should meet together for consultation and action, at such times and places as they might deem expedient. Although no doubt was expressed of the propriety of such an organization, there were other subjects

connected with it, such as, who should be members of the association? how and by whom should they be selected? if delegates, what should be their number? what power should be conferred upon them, and how far should their acts be binding upon the bodies whom they represent? concerning which there would probably be difference of opinion. As no one had been charged with the consideration of these subjects, no definite plan of organization had been prepared, upon which the Convention could act with that careful deliberation which the importance of the business demanded. It was thought best, therefore, to postpone all definite action upon it until a future Convention. This opinion was strengthened by the fact, that although the number of members present was larger than had been anticipated, yet many most respectable medical societies and schools, who are doubtless equally solicitous with those who were present, for the welfare of the profession, and as ready to promote its interests, were not represented. This deficiency, it was hoped, would be remedied in a future Convention. In the meantime, the consideration of these subjects was intrusted to a committee, who will prepare a plan for a National Medical Association, which will be presented to the proposed future Convention.

The other subjects which engaged the attention of the Convention, related principally to medical education; such as the qualifications which should be required of those about to engage in the study of medicine; the course of study which should be pursued by them; the mode of examination which should be adopted, and others of a similar kind. For reasons like those given above, these several matters were also placed in the hands of committees to examine, and report upon them. The same course was also pursued in regard to the preparation of a code of medical ethics, by which the intercourse of physicians with each other, and with the public, shall be regulated.

From this statement it will be seen that matters of great interest are presented for consideration, and that if wise measures in regard to them are adopted, such errors and abuses as may be found to exist, will be corrected; the profession will be guarded against the admission of incompetent or unworthy members; the purity, professional and moral, of those who are allowed to continue in it, will be preserved; and that thus full assurance, such as it has a right to demand, will be given to the community, that all who are acknowledged by medical men to be of their number, are worthy

and competent to perform the duties, and to sustain the resposibilities of an arduous and honorable profession.

It remains to be seen whether these desirable objects shall be accomplished. It is obvious that this can be done only by general and united exertion. All partial or divided action will be unavailing. It is equally true, that whatever is done, must be accomplished by medical men themselves. In some countries, the interests of the medical profession, like others of great importance to the community, are regulated. sustained, and protected by public law. In this country, no general law, even if it were desirable, can ever exist. In many of the states, no laws upon this subject have ever been enacted; in several, where they have formerly existed, they have been repealed, and in those where they still remain, there is a general complaint of their inefficiency. In this state of things, the only resource which remains, is, for medical men to establish and enforce among themselves such regulations as shall purify and elevate their own body, and thus more fully command the respect and confidence of their fellow-men. The proposed association, if it becomes general, may be the means of accomplishing much of this good work. The opinions of such a body of the most respectable members of the profession, enjoying the confidence of their brethren, and of the public, freely expressed after full consultation and careful deliberation, although not clothed with the authority of the law, will still command respect, and for the most part, compliance. A public opinion in regard to the subjects decided upon, will be created, which will be more controlling than law. It is by creating and sustaining a sound and healthy public opinion, that the association will prove most beneficial.

In calling the attention of the physicians of this country to such an effort at this time, it is not intended to express the opinion, for no such opinion is entertained, that they are behind those of other countries, or the members of the other professions in this, in general intelligence, in scientific attainments, or in practical skill. Still it is to be remembered that the present is peculiarly an age of advance in every department of science, and that at such a time to rest satisfied with present attainments, and to make no provisions for increased acquisitions, is practical retrocession.

In this state of things, the committee feel themselves fully authorized to call upon the medical profession throughout the country to consider, carefully and deliberately, the matters which have been presented to them, and upon which a

future convention will be called on to act. They also earnestly invite all medical societies, the faculties of all medical colleges, and all similar associations to appoint delegates to meet in Convention in Philadelphia, on the first Wednesday in May, 1847.

It is confidently believed that a Convention thus constituted, embodying the wisdom, and acting under the sanction, and with the authority of the united profession, will devise such measures as shall command the respect of all who are interested in the promotion of the medical science, and the physical welfare of man.

In behalf of the Committee,

J. KNIGHT, M.D., *Chairman.*

Aneurism, spontaneously cured. By W. H. ROBERT, M.D., of Madison, Ga.—Mr T. Harris, aged about 35 years, was bled by a neighbor on the 17th April last. On seeing him a few days after, he stated that immediately after his arm was bound up he observed a tumor where he had been bled, which had continued to increase ever since. The arm now presented all the symptoms of aneurism; diminished temperature, indistinct pulsation of the radial artery at the wrist, a pulsating tumor which subsided on pressure, and filled again when this was discontinued, which ceased to pulsate when the brachial artery was compressed, and in which the bellows sound was distinctly heard.

I explained to Mr. H. the nature of the operation usual in such cases, and advised him to submit to it. Finding, however, that he was unwilling to adopt this course until he could gather in his crop, I advised him to keep the arm perfectly quiet. In July the tumor had attained the size of a hen's egg, but about the second week in August it began to diminish, the pulsation became less distinct in the tumor and stronger at the wrist, the arm grew warmer, and this state of things has been gradually progressing until the present time. The arm now presents the following appearance: it is as warm as the other; the pulsation at the wrist is normal; there is no pulsation whatever in the tumor, which is about the size of a filbert and apparently perfectly encysted, being easily moved about under the skin, and which does not diminish on pressure. I attribute this unexpected result to the quiescent state of the limb.—*Southern Med. & Surg. Jour.*

Report upon the Hemostatic Virtues of the Brocchieri Water and Ergotine.—The editors of the *Southern Journal of Medicine and Pharmacy* have made an interesting report on this subject, in which they come to the following conclusions:

From the numerous experiments performed, and from the manner in which they were modified, as well as the care bestowed upon them, without reference to their favorable or unfavorable results, we are warranted in coming to the following conclusions:

1st. That when Brocchieri Water, ergotine, or a watery emulsion of creosote, is applied to the divided artery of a sheep, it depends greatly, if not altogether, upon the manner in which the lint is applied to the wound on the artery, whether the hemorrhage is arrested or not. If it be placed immediately upon the orifice of the cut vessel, the success is certain; if, however, the vessel shrink from contact with the lint, the animal is almost certain to bleed to death. The former is shown by the experiments 4 and 5 of the first report, and by 3, 5 and 6 in the present one; and the latter, by experiments 1, 2, and 4, in this report.

2d. That by a small pledget of *simple lint*, placed immediately upon the incision made into a sheep's carotid artery, that the homorrhage is arrested in a few moments; and after a lapse of from twenty to thirty minutes, the animal may be let loose, without any apprehension of the return of the hemorrhage. If the lint be applied so as not to touch the wound in the artery, all effort to arrest the hemorrhage becomes ineffectual; this is proved by reference to experiments 1, 2 and 3 of the first report, while experiments 7, 8 and 9 give evidence of what was first stated. From these results, it will be seen how many difficulties often attend the simplest experiments, and how important it is to leave no point, not the most apparently trivial, without close examination; it is true, it requires time and trouble, but both are more than compensated for by a knowledge that we become in possession of truths that are important to ourselvs and to others.

3d. The sheep is an unfit animal to try the hemostatic power of substances, with reference to what their fitness may be in the case of the human subject; for although sheep will bleed to death by a wound in one of the larger arteries, still, by the application of a small pledget of lint, sustained with a little pressure *immediately upon the wound in the vessel*, the hemorrhage will cease, and the animal survive. The

same we are convinced may be said of all like experiments upon the lower class of animals, as in many of them the hemorrhage from the larger vessel will be arrested spontaneously; this is true of the dog; in fact, so far as our knowledge extends, the sheep is more readily bled to death than almost any other of the quadrupeds. Furthermore, the blood of animals is more plastic, coagulating with far greater rapidity than that of man; and as the arresting of the hemorrhage in these experiments is dependent upon the formation of a clot around the opening and in the cavity of the vessel, it ought therefore to happen more readily in them than in man.

4th. If the hemostatic virtues of the agents already alluded to, are to be correctly ascertained, it is only *by experiments upon the human subject*, and no value should be given to those made in any other way. Whether the Brocchieri water, ergotine and creosote will stand this test, we are not as yet prepared to say, although several experiments made with them have come to our notice, but they are of so contradictory a character, that no definite conclusion can be formed. These substances no doubt hasten the coagulation of blood, and may, under some circumstances, arrest hemorrhage coming from the smaller arteries; but in the case of the larger vessels, they are of no manner of use, at least not more than the lint without them.

The experiments on the human subject that have come to our notice are,—wound on the hand, oozing, some time after the operation of hydrocele; oozing from a tumour on the back;—tried with Brocchieri water. In the first case, there appeared to be no effect; in the last two, some slight effect; the oozing in the case of the hydrocele, although diminished, could not be arrested. In a case of hemorrhoids that was operated upon, application of the ergotine was made with apparently good effect. In two cases of operation for hydrocele, the emulsion of creosote was used; in one of them, the bleeding from the small vessels was arrested; in the other no effect. So it is clear, that as yet, there is no danger of ligatures being supplanted by either of the above agents.

Compound Fracture of the Cranium—Loss of a portion of the Brain—Recovery. By Paul F. Eve, M.D., Professor of Surgery in the Medical College of Georgia.—In the July No., for this year, of the Provincial Medical and Surgical Journal, (England,) Mr. F. P. Smith relates a case of compound frac-

ture of the skull in a child of four years old, who perfectly recovered, notwithstanding there had been the loss of a portion of the brain. The boy while playing under a wagon, had his head caught between the spokes of the hind wheel, and the horses starting at this moment, he was carried round and his head forced between one of the spokes and a projecting iron bolt, a space of not more than three inches and a half.

"On examining the head, I found a most frightful lacerated wound of the scalp, extending from the right temple across the forehead, and terminating in the left eye-brow; the frontal bone was laid completely bare, and the right superciliary ridge from its external to its internal angle, including a portion of the orbitar plate, was torn up. On removing this, which laid loose in the wound, I found attached to it a portion of brain, of the size of the end of the little finger, and weighing about thirty grains; four other smaller portions of bone were also removed. After cleansing the wound, I brought the flaps together, retained them so by means of several sutures, leaving a depending opening at the outer angle. Lint, dipped in cold water, was kept constantly applied over all, including the eye, which appeared to have received irremediable injury. The little patient was placed in bed, an active purgative was given, and he was confined to a milk and water diet, which was continued for a fortnight. On the following day I found he had passed a tolerably quiet night, the medicine had acted freely, and in all respects he was very much better than I expected to find him.

"To be brief, the case progressed most favorably, without a single bad symptom; in three weeks the wound had healed excepting a small opening at the outer angle; and at the end of six weeks he was playing about in his usual health. The sight of the right eye is gone and he is unable to raise the eyelid. After recovery, this boy exhibited the same restless and mischievous disposition as before the accident, which caused the loss of a portion of the cerebral substance."

Cases of recovery after portions of the brain have been lost do, occasionally occur both in civil and military practice. Some most remarkable instances will be recalled by those familiar with the records of surgery. These, however, will not vitiate the principle long established, that death is the usual result when the substance of the brain is injured in compound fractures of the cranium.

The only case where recovery took place under these circumstances within my observation, is the one about to be detailed, and the reader will remark how similar in many respects it is to the one quoted above.

A son of one of our physicians, aged six years, while leaning out of a window, fell the distance of nineteen feet upon a brick pavement. Those who saw him fall, stated he first struck his forehead, then rebounded, and was taken up for dead. This happened in September, 1840. When seen a few minutes after the accident, the left superciliary ridge or process of the os frontis was found fractured, and lying loose in the upper eyelid. It seemed to have but one attachment, and that near the nasal process of the same bone. A portion of the brain was oozing out of the lacerated wound made in the integuments near the external angle of the left eye. Our attention too, was was directed to some cerebral substance at the spot where the fall took place. I estimated the quantity of brain which escaped at the time of the accident and during the subsequent dressings to amount to a teaspoonful, or about forty grains weight. In addition to the compound fracture of the cranium with the accompanying symptoms of depression, &c., the patient sustained a dislocation of both hands backwards. These were reduced, but his father objected to the removal of the loose fragments of the superciliary process from the eyelids, or even to an attempt by pressure to replace them. The treatment pursued in the case was essentially negative, reaction spontaneously occurred without much inflammation, and in the course of a few days, the patient was sitting up.

Up to the present date, six years after the accident, Robert has continued to enjoy good health with the exception of occasional convulsions. His physical and mental faculties have been steadily developing, and he remains what he was previous to his fall, a very active restless boy. There is still a marked fullness in the left eyelid, produced by the superciliary process which is felt near its tarsal cartilage. The sight of his eye is good, but the lids often inflame and ulcerate. Above this is a large space occupied by bone, and where pulsation can be seen and felt. Pressure, or a blow, upon this spot at any time has produced convulsions, and his parents think he cannot confine his mind to close application or study.

In operating with the trephine, I have injured the brain, without unpleasant consequences to the patient.—*Southern Med. & Surg. Jour.*

Treatment of Cataract.—At the session of the Congress of Italian *savans*, held in Naples last year, Prof. Paliotti recommended as a remedy for cataract the internal use of iodide of potassium, and ammoniacal cauterization on the temples. He declared that even in cases where this treatment did not effect a cure, it rendered the success of the operation more certain. M.M. Quadri and de Horatus were appointed to make experiments with this method and report the result of their observations at the next session.—*Gaz. Médicale.—Ibid.*

Treatment of Nervous Constipation.—Prof. Lippich combats constipation, when it obstinately resists the means ordinarily employed, by the use of the following lavement:

℞ Asafœtida, - - - - - - - 12 grammes.
Common Vinegar, - - - - 30 grammes.
Honey, - - - - - - - - 60 grammes.
Barley Water, - - - - - 300 grammes.
Yolk of Eggs, - - - - - q. s.

Mix thoroughly, and divide into two lavements to be administered with an interval of an hour.—*Ibid.*

Poisoning by Arsenic.—The widow M., and Antoine B. were recently tried at the assizes of Herault for the double crime of adultery and poisoning the husband of the female prisoner. The facts, as they appeared in evidence, were as follows:—In August, 1844, shortly after several violent quarrels between M. and his wife, caused by the intimacy between the latter and B., and just at the period when B., because of the consequent scandal, had lost his only means of subsistence, M. fell sick. The symptoms of his malady were shiverings, cold perspirations, great itching in the extremities, and at length considerable emaciation. As no suspicion was then excited, and as the symptoms presented periods of subsidence which simulated intermission, they were considered as the effect of accesses of fever, especially as intermittent fever is epidemic in the locality, and his wife was actually laboring under that disease. The wife, becoming convalescent, paid a visit to her family, and during her absence, her husband, whose malady had been so serious that he sought for the consolotions of the church, became convalescent also. On the return of the wife, the husband's malady again be-

came aggravated, and continued until the vintage, at which period the wife again left home to superintend some matters of business, and during her absence, which continued a fortnight, the husband's health was so far re-establishing that he was able to look after his affairs. His physicians then considered that he had only to continue the prescribed regimen to become perfectly restored to health. From this period M. continued in the country with his wife, but his convalescence, instead of being progressive, was suddenly interrupted. For a few days he felt tolerably well, but then his former sufferings commenced to return. New symptoms were also gradually superadded; vomiting occurred several times, and the wife on each occasion threw the ejected matter out of the window. On one occasion M. vomited on the floor, and the wife scattered ashes on what was thrown from the stomach, and subsequently washed the floor with potash.

Nothing as yet, however, indicated that M. was near his death. Early in December he attended to his affairs as usual; but on the 5th of that month, after a short walk, he became chilly, and took to his bed in the afternoon. From that moment his wife never left him, and no one else entered his chamber.

On the 6th December M. died, no one being present, says the wife, who informed the inmates of the house that her husband had just expired tranquilly, and without convulsions. The inferior extremities, however, were found contracted, the body was already cold and cadaveric, rigidity so great that it was impossible to remove the clothes completely.

Some vague suspicions at first existed, but soon subsided, until they subsequently become revived and strengthened by a train of circumstances unnecessary to be detailed. The authorities then directed the body to be exhumed, when the usual fact was observed, that the extremities were completely decomposed, while the parietes and viscera of the abdomen, which usually putrefy first, were in a state of perfect preservation. This circumstance, together with the existence of some yellow stains, such as might be produced by the action of the certain products of putrefaction on a compound of arsenic, raised a suspicion that M. might have been poisoned by such a substance. This suspicion was converted into a certainty by chemical analysis. Arsenic was detected in the intestines, in the liver, in the spleen, in the kidneys, in the bladder, in the heart, in the lungs, in the muscles of the stomach and of the abdomen, as also in the liquid contents of the hollow abdominal viscera.

As M. had vomited several times, and his wife had disposed of the material vomited by throwing it from a window, and washing the floor, arsenic was sought for in these situations. The soil in the immediate vicinity of the window and also at a certain distance from it, was collected and analysed, as were scrapings from various parts of the floor of the chamber. Arsenic was detected to a marked amount in the soil collected next the wall immediately under the window, and also, but in a much smaller quantity, in that collected within the space of 8 or 10 feet from that point. All the scrapings from those parts of the floor which were stained with the material rejected by vomiting yielded arsenic, but not a trace of that substance could be detected in those taken from other situations.

In anticipation of a system of defence, which was actually adopted, some earth taken from above, from beneath, and from each side of M.'s coffin was analysed, and was found to be completely exempt from arsenic.—*Dublin Med. Press* from *Gaz. Médicale.—Med. Ex.*

Poisoning by Lead-Shot left in a Bottle.—An individual was seized with violent colic and symptoms of poisoning, after having drank several glasses of liquor. Dr. Hohl, who was called to the patient, examined the liquid, and found it to be turbid instead of clear; and on pouring it out into a glass, he discovered at the bottom of the bottle two pellets of shot which had become firmly fixed and converted by corrosion to carbonate of lead. On examining them, he found only a very small nucleus of metallic lead in the centre of each: so long as the liquor was clear, no ill effects had followed its use,—these had only occurred when the turbid portion, near the bottom of the bottle, had been taken. The liquor was proved to hold suspended a salt of lead, from which the symptoms of poisoning had undoubtedly arisen. This shows that great care should be used in cleansing bottles; and that a few shot left in them may give rise to all the symptoms of lead-poisoning.—*Lon. Med. Gaz.—Ibid.*

Cholera in Holland.—This disease, under the mild form of what has been termed by the French *cholerine*, has made its appearance at Amsterdam and Rotterdam, and has already attacked a great number of individuals, but not one of the cases has proved fatal.—*Naval & Military Gaz.—Gaz. Méd. —Med. News.*

Two ounces of Nitrate of Potash taken at once.—Mr. Gillard communicated to the S. W. branch of the Prov. Med. and Surg. Association, an account of a case in which two ounces of nitrate of potash were taken by a man in mistake for epsom salts. Five minutes after taking it a burning pain in the stomach was felt, which was followed by sickness. The mistake was then discovered. A mustard emetic was administered, followed by carbonate of magnesia and opium. Under this treatment the patient speedily recovered.—*Ibid.*

Digestion in 1846.—At last the phenomena of digestion are enlightened: digestion is no more to be considered a simple but a complex function. There are as many digestions as organs. First, the stomach, by which animal food is dissolved; it is in carnivorous animals almost the only intestine and they require no other; their digestion is gastric; it is intestinal in herbivorous tribes. After the incisors and cuspidati come the molares: in the same manner after the carnivorous intestine we find the intestines which digest grains and vegetables masticated by the molares. In the small intestines, feculent substances are absorbed and saccharified—a fact proved by a simple experiment; fecula taken in the stomach immediately above the pylorus will become blue when placed in contact with iodine, and will, on the contrary, not change color after its passage through the pyloric orifice. It is this, the principal phenomenon of digestion in the duodenum, which has led to the discovery of the saccharifying power of the pancreatic secretion. Hence not only a change in the theory of digestion, but in the pathology of diabetes; we can no longer admit that the kidneys secrete sugar, but that they allow the passage of the saccharine matter contained in the blood.

All these discoveries are in themselves important scientific acquisitions; but their importance is doubled when their practical consequences are reflected upon. The whole history of gastralgia, *rudis indigestaque moles*, must begin anew. No theories can be compared to the recent discovery of the following facts. Eat meat, the urine becomes acid; eat vegetables, it immediately becomes alkaline.

The gastric juice is a powerful acid which readily gives birth by fermentation to gaseous products. In dyspepsia it is therefore a mistaken practice to recommend the use of alka-

line salts, by which the digestion of animal food is retarded. The corrosive nature of the fluid accounts for gastric pain, pyrosis, &c., most probably the result of its contact with dry portions of the mucous membrane. By fermentation in the stomach, foul breath and flatulency will be produced; alkaline medicines will be of no avail, but mild laxatives are fully indicated. The digestive power of the gastric juice varies with its heat: below 10 degrees and above 35 degrees, that power diminishes and is completely lost beyond 50 deg. It is therefore not proper to eat very hot substances.

The stomach being the organ in which animal food is dissolved, meat should not be given in gastric affections; whereas feculent substances, digested in the jejunum, can be safely permitted.—*Med. Times* from *Jour. de Méd.—Ibid.*

Cholera in Persia.—The last Levant packet which arrived at Malta brought the intelligence that the cholera had broken out in Persia, particularly at Teheran, where one of the brothers of the Schah has fallen. The Schah, with his court, had sought refuge in the mountains. It is feared that, as in 1832, this scourge may again visit Asia Minor and the Mediterranean.

The latest intelligence from Aden announces that the cholera had disappeared from that place, and that the troops were healthy.—*Lond. Med. Gaz. —Ibid.*

Delirium Tremens in an Infant.—A little boy, five years of age, swallowed by mistake a large quantity of brandy. Vomiting speedily followed, and he passed a restless night, sleeping only toward morning. On awaking, it was observed that he had tremor of the hands, and that he could not hold a cup steadily. Convulsions with cramps ensued. The pulse was slow, the look timid, the pupils dilated, and the countenance pale. Delirium supervened, and there was dysuria with great thirst. A cataplasm was applied to the abdomen, and calomel and jalap were administered. The symptoms abated about the middle of the day; but towards evening there was a return of the tremor, with other nervous symptoms. An opiate was exhibited, from the effects of which the child slept soundly, and on awaking the whole of the symptoms had disappeared.—*Gaz. des Hôp.—Ibid.*

Cholera at Kurrachee.—The seaport of Kurrachee, formerly one of the healthiest military stations, has, ever since it became known to us, been visited triennially with cholera. In 1839, and again in 1842, the amount of suffering occasioned by it was terrible, yet slight to that which it has just endured. Between the 13th and 23d June, above 8000 human beings were cut off by it, including 895 Europeans, of whom 815 were fighting men, 595 sepoys; and, it is believed, about 7000 natives, besides camp followers, and inhabitants of the town, have died. The pestilence had quitted Kurrachee, and was apparently creeping up the river. Fever of a very fatal kind had made its appearance amongst the European soldiers at Sukkur: its triennial visit is to be looked for next year. Her majesty's 17th had chiefly suffered: it was said they were to be moved down, while her majesty's 86th were to move up to Hydrabad.

An extremely dry season has been followed by an unusually wet one; between the 9th of June and the 17th July upwards of 35 inches of rain fell.

The Kurrachee Advertiser states that 7000 of the inhabitants have been cut off by cholera—nearly 9000 victims in ten days' time.

Of the 60th Rifles there died 4 sergeants, 101 men, 4 women, and 3 children. Total, 112.

Of the 86th Regiment: 1 officer, 24 sergeants, 329 men, 17 women, and 16 children. Total, 387.

Of the Company's Artillery: 4 sergeants, 19 men, 2 women, and 6 children. Total, 31.

Of the 1st Bombay European Regiment (Fusiliers): 1 officer, 18 sergeants, 314 men, 9 women, and 23 children. Total, 365.

Of the 3d N. I., 310 sepoys; of the 12th N. I., 236 sepoys; of the Belooch Batt., 49. Grand total, 1490; independent of the inhabitants.—*N. & M. Gaz.—Ibid.*

Chronic Articular Inflammations.—M. Biéckly prefers the following formula:

Nitrate of silver, ʒiv.
Water, sufficient to dissolve this salt.
Lard, ʒxxxii.
Mix.

Frictions are to be made twice a day, with 4 or 5 scruples each time. The third or fourth day the skin will have the

aspect of shining black polished leather. These frictions produce no pain nor tegumentary irritation, if we except some few vesicles. The treatment ought to be stopped now for a few days, until the black epiderum peals off, and the skin resumes its normal color. Under this ointment, deep articular alterations are modified; the heat and pain subside, the effusion is absorbed and the swelling dissipated. M. B. thinks the preparation is absorbed.—*S. Med. & Surg. Jour.*

Asiatic Cholera.—This disease, which made its appearance at Aden early in May, has, in consequence of the changing of the monsoon, nearly vanished, isolated cases occurring only at intervals. During the five days it raged, upwards of four hundred persons were carried off, the deaths being four out of five attacked; the cholera is, however, rapidly advancing along the territory of Yemen, and fears may be entertained of its appearance on the shores of the Mediterranean. The disease is making dreadful havoc in India.—*Med. Times.—Ibid.*

Anecdote of the Pay of Physicians.—One day, old Kien-Long, Emperor of China, asked George Stanton how Doctors were paid in England. When he comprehended the system, he exclaimed, "can there be a single Englishman in good health? Let me tell you how I treat my physicians. There are four to whom my health is confided. They receive a certain sum every week; but the moment I am taken sick, their salaries are stopped until I get better. It is scarcely necessary for me to add that my complaints do not last long."—*S. Med. & Surg. Jour.*

THE WESTERN JOURNAL.

New Series.—Vol. VI.—No. VI.

LOUISVILLE, DECEMBER 1, 1846.

With the present number is completed the fourteenth volume of the Western Journal of Medicine and Surgery, and at the conclusion of it we have but a few words to say to our readers. We have labored to render the Journal useful, and the marks of public favor afforded by the subscription list are such, that we are encouraged to persevere in our labors. The first number of the fifteenth volume will appear punctually on the first day of the New Year. We have again to solicit from our professional brethren the contributions of their pens, and would particularly invite their attention to the unassuming department, in which we record "facts from correspondents." We shall be thankful for any medical facts communicated, no matter how brief, or how unstudied soever the form; and we trust that among our readers there are many who would be willing to take some pains to increase the number of our subscribers. With a trifling exertion on the part of those who take an interest in the Western Journal, we feel assured that the list of its subscribers might be doubled in the course of a single year. May we not hope to be witnesses of such a result, which, while it might be beneficial to the interests of our profession, would afford us fresh incentives to labor?

UNIVERSITY OF LOUISVILLE.

It affords us great pleasure to say, that the first session of our University opens auspiciously. As our readers generally know, that which *was* the *Medical Institute of Louisville*, is now the MEDICAL DEPARTMENT of the UNIVERSITY OF LOUISVILLE. The ultimate number of pupils in the last session of the former, was three hundred and forty five; the present number, constituting the first class of the University is three hundred and thirty nine. A few more may be added, of such as have been kept back by sickness, or are but beginning the study of medicine. Thus the class is substantially the same as that of last year; but as the population of the interior of the continent is increasing, our class should also have increased. This we believe would have been the case, but for two or three causes which we shall proceed to assign.

1st. The session of 1844 had two hundred and eighty-six—that of 1845, three hundred and forty five, an advance of fifty-nine.—Now this extraordinary increase was, in fact, that of two years. It was a rate of growth which, of course, could not be kept up.

2d. The volunteering for the Mexican war has, beyond a doubt, taken off students who might have been here.

3d. The general reduction in the amount of the cotton crop, is known to have kept away a number. These, we think, are the causes why the present is not larger than the preceding class.

That the class has risen a second time to more than three hundred, shows that the increase of last year was not owing to any temporary causes, as some persons at that time conjectured; and that it may be maintained at what it is, is rendered extremely probable. We can see no reason, indeed, why the number should not rise to three hundred and fifty, and continue at that average; for ten years are not sufficient for the full development of a school, and the present is but the tenth session of ours. When it was begun in 1837, the number of interior schools was six—it is now fourteen. Thus in ten years, seven new ones have been started, showing that ours has not attained its pre-eminence without a well contested and earnest competition.

We may be permitted again to mention, that the Trustees of the University of Louisville have erected a LAW DEPARTMENT, of three professorships, and appointed Messrs. Pirtle, Duncan, and Lough-

borough, distinguished members of the Louisville bar, as professors. The first session of the school opened with the beginning of November. The number of pupils, we understand, is thirty-two, which may be regarded as decidedly promising for a first class. By the ordinances of the University they are entitled to gratuitous admission to all the lectures on Medical Jurisprudence delivered in the medical department.

PROGRESS OF DENTAL SURGERY.

We have lately received the first annual catalogue of the Ohio College of Dental Surgery, in Cincinnati. It has a board of trustees acting under a charter from the Legislature of that State, and a respectable Faculty, including professors of Anatomy and Chemistry. The three professors of Dental Science and Art, are not inferior in skill and attainment to any others in the Valley of the Mississippi. The college has erected a suitable edifice and furnished it with the requisite means of instruction. The class of last year was decidedly encouraging. We cannot but look with warm approbation and lively hope upon this first Western effort to create a school for the education of dental surgeons; and we trust that the day is not distant, when no dentist will receive the patronage of society who is not regularly educated.

We have also received the "Proceedings of the Mississippi Valley Association of Dental Surgeons," at their second annual meeting, held at Cincinnati, in the Hall of the College, in the month of September last. One object of this Association is, to create a profession, and dignify it, by adopting high rules of professional conduct. Another, is to elicit papers that shall communicate valuable discoveries; thereby provoking that discussion which cannot fail to develop truth, correct error, and quicken invention. These objects are of the highest importance. We perceive by the "Proceedings" that the Association numbers about thirty members. It should comprehend at least a hundred; and we hope ere long to hear of such an augmentation. It is time that those who practise this branch of the healing art should awake from their slumber, and leave their insulation,

and look each other in the face, and take each other by the hand, and make "a long pull, a strong pull, and a pull all together," to advance and elevate that portion of *the* profession which is confided to them.

ERRATA.

Page 370, line 5 from bottom, for 'readers,' read 'reader.'
" 371 " 10 " " 'of train,' read 'train of.'
" 372 " 11 from top, for 'scurvy,' read scurfy.'
386, 425, and 427 pages, after 'Med. Chir. Rev., read 'new series.'
397 line 23, and 398 line 12, for 'purpura,' and 'purpuraceous,' read 'furfuraceous.'
Page 399, line 5 from top, for 'where,' read 'whose.'
" 400 " 8 " for 'suitable,' read 'situated.'
" 402 last line, for 'tathe,' read 'at the.'
" 405 line 33 from top, for 'enables,' read 'enable.'
" 406 " 27 " for 'appears,' read 'appear.'
" 415 " 3 " after esteemed, read 'as.'
" 415 last line, after diversity, read 'of opinion.'
" 416 line 21 from top, for 'varieties,' read 'variation.'
" 419 " 3 " for 'iodine,' read 'iodide.'
" 419 " 5 " for '$\frac{1}{52}$, $\frac{1}{54}$,' read '$\frac{1}{54}$, $\frac{1}{32}$.'
" 419 " 15 " for '$1\frac{1}{8}$,' read '$\frac{1}{18}$.'
" 424 " 23 " for 'removed,' read 'renewed.'